

NATIONAL PROBLEMS

By

CHANDRA CHAKRABERTY

PUBLISHED BY

RAM CHANDRA CHAKRABERTY, M. A.

58, *Cornwallis Street, Calcutta.*

1923.

1. Food and Health	...	...	Rs. 1/8
2. Principles of Education	...	...	" 1/-
3. Dyspepsia and Diabetes	...	...	" 1/-
4. A study in Hindu Social Polity	...	...	" 3/6
5. An Interpretation of Ancient Hindu Medicine	...	...	" 7/8
6. A Comparative Hindu Materia Medica	...	...	" 3/12
7. Infant feeding and Hygiene	...	...	" 1/8/-
8. Endocrin glands	...	...	" 1/8

PRINTED BY K. C. CHAKRAVARTTY,
GIRISH PRINTING WORKS,
51-2-6, SUKLA STREET, CALCUTTA.

To

PRABHĀ

An Affectionate And Loving Tribute.

BY THE SAME AUTHOR

1. Food and Health	...	...	Rs. 1/8
2. Principles of Education	...	...	" 1/-
3. Dyspepsia and Diabetes	...	...	" 1/-
4. A study in Hindu Social Polity	...	...	" 3/6
5. An Interpretation of Ancient Hindu Medicine	...	...	" 7/8
6. A Comparative Hindu Materia Medica	...	...	" 3/12
7. Infant feeding and Hygiene	...	...	" 1/8/-
8. Endocrin glands	...	...	" 1/8

PRINTED BY N. C. CHAKRAVARTTY,
GIRISH PRINTING WORKS,
51-2-6, SUKKA STREET, CALCUTTA.

10

PRABHĀ

An Affectionate And Loving Tribute.

PREFACE

It is a thankless and unpleasant job to criticize one's own beloved country and her institutions. But my criticism is constructive rather than destructive, for it has not been made only to find faults but to point out the organic lesions where they exist, and how to cure them. The path is, indeed, narrow, tortuous, thorny, long, uneven and tedious, for there is no high road to Progress. But I believe, that with the right comprehension of the problems that need to be solved, half the task is already accomplished. There is a good deal of self-sacrificing impassioned enthusiasm in India for the service of the Motherland; but, usually it is dissipated in the wrong direction, thus bringing in its re-action terrible disappointment and hopeless pessimism. This book humbly proposes that National Progress is to be laid on the bed-rock of education, industry and hygiene, and not upon the treacherous sand of fleeting emotions and political passions.

14th Nov., 1922.

C. CHAKRABERTY.

THE SIKHS DEMAND

CONTENTS

CHAPTER.	PAGE.
Introduction	1
I. Industry	29
Agriculture. Coal and Iron Industries. The Cotton Industry. Hydro-electric Development. Transportation. Cattle-breeding. Fisheries. Forestation. Capital and Labor.	
II. Religious Reforms	47
Hinduism. Reform Movements. Mahomedanism. Christianity. Buddhism.	
III. Social Reforms	71
Marriage. Widow-remarriage. Inter-caste Marriage. Prostitution. Joint-family System. Population. Birth-control.	
IV. Educational Reforms	101
Education. Library. Philological Bureau. Newspapers. Translation Bureau. Publishing House.	
V. Hygiene	118
Drinking Water. Malaria. Hookworm Disease. Habitation. Alcohol, Nicotine and Opium. Dietetics. Dress. Ornaments. Physical Exercise. Sexual Hygiene.	
VI. Growth of Nationalism	140

THE SIKHS DEMAND

INTRODUCTION.

It is not possible to write on 'National Problems' to-day, ignoring the political question of the country. For rightly or wrongly, on it has been focussed the attention of all thinking classes, and is regarded as the centripetal force, round which all other problems are rotating, and its solution is expected to solve all the rest automatically. In almost all progressive countries to-day, whether professing monarchic or republican form of government, politics is invariably shunned by all honest men, for it is corrupt and corrupting, and there is no place in it for any but self-seeking, self-centered, vain, autocratic, unscrupulous and opportunistic mediocrities, for the government is administered, whatever may be its outward form, by a secret clique—in a monarchy by the royal scions and their chosen favorites, and in a parliamentary institution or republic by the representatives of plutocratic financiers and their captains of industry. Whatever may be the election platform, a government is a huge and intricate machinery of vested interests, in which all the newcomers are gradually but thoroughly trimmed to fit well to the mechanism, or crushed and mercilessly thrown aside by its huge and ponderous engines. But in spite of the inefficiency, incompetency, venality, favoritism, extravagance and wastefulness of the administration, a government if followed by a private corporation in the management of its business, would ere long lead to insolvency and bankruptcy. If the Western Nations

are making progress, it is because, the 'State' fosters and protects the industrial development of the country, as a principle of national pride, revenue and for the profit of the moneyd interests, and the accrued savings being reinvested in the country in profitable enterprises, which necessarily cause increased circulation of wealth, and consequently benefit all the citizens directly or indirectly. For 'capital' is nothing but the surplus accumulation of the savings out of profit, which has not been consumed in the operative and personal expenses, and this liquid capital is available for the development of the country's natural resources and in the production of manufactured goods for the home consumption and for the foreign trade, thus employing all labor that otherwise could not be engaged in gainful occupations. The government protects the infant and other industries which can not manufacture goods cheaper than competing nations by a strong tariff barrier, thus to see that they can stand on their own legs and that national wealth is not drained off, and it is for foreign trade in those goods which it can produce cheaper, thus fostering international commerce and drawing wealth from other nations by favorable trade. Where it has not raw materials available within its territory, it tries to secure its uninterrupted and constant supply, either by colonial enterprises, political control or economic exploitation. The government derives its power from the governed to safeguard their lives, property and interests, and the army, navy and the civil service are to preserve them, if they threatened by external aggression or by internal disturbances. The government is the commissioned ag

of the majority of the populace, to act on behalf of all by general consent, believing that a central authority would be able to look after their interests more economically and efficiently than they otherwise individually could manage.

The government of India in this regard is an anomaly, for it has received no delegation of power from the Indian people to act on their behalf, nor is responsible to them for the administrative conduct, but is appointed by an alien bureaucracy which simply looks to the interests of its own constituency. So the political relation between India and England as it stands to-day, is abnormal, apparently antagonistic—the exploited and the exploiter, and this is causing excessive irritation to the body politic of the peninsula. When the body functions well, we do not notice its mechanism. Only a dyspeptic feels his stomach, but not one who digests normally. But when the body is sick as in fever, it is useless simply trying to remove the local symptoms by antipyretics or cold douche. Itching can not be removed by irritating the skin. Their etiologic factors have to be ascertained and remedied. Fever and itching are but local manifestations of deeper organic lesions. As in fever or itching, all our thoughts are diverted to their immediate relief, mindless of their deeper underlying causes, believing thereby that the body would be cured of its malady, so the best minds of our country are being devoted to solve the problem as how to remove the parasitic growth of irresponsible, autocratic, alien domination which is provoking pruritis and sapping the organic vitality.

However sordid may be the politics in other

countries, in India it is still noble, pure and unselfish, as is exemplified by the inspiring, self-denying saintly lives of Mohonchand Karamchand Gandhi, Pundit Motilal Neheru, S. Chityaranjan Das, Sree Aravindo Ghosh, S. Syamsundar Chakravarti and many thousand others, who though less known, are no less noble in their characteristics. The methods may be questioned as to the efficacy of attainment of the desired and promised result, but their purpose is earnest, their devotion to the weal and welfare of their *Motherland* is ardent, and their motive is sincere and humanitarian.

Foreign subjugation is of course humiliating, irritant and provoking. And naturally there is a heart-felt yearning and striving for national self-government, freedom and independence. One with a growing ethnic solidarity and national consciousness, feels the reflected glory of his country, and in its subjugation feels the stigma of personal disgrace and slavery. It is the universal psychic emotion.

But humanity is not yet guided by an abstract sense of justice, and brotherhood of man is yet far distant except in theoretical principle. In practical politics of international relation, there is no conception of equality, conscientious scruple or consideration of human feelings. Nations are actuated by material self-interest, and they are friends as long as their interests harmonize, and they become enemies when they clash. The struggle for existence is as acute among men as among the lower organisms. The only difference is that among progressive nations, they act in concert forming a group, called 'state,' while animals act individually

to satisfy their impulse of hunger. But that is only a relative question of evolution and development of technique.

In the primitive stage of human history, the families of the same ancestral blood grouped together and formed into clanship for offensive and defensive purposes as they learnt by experience that thereby they could better safeguard their mutual interests. A stronger clan fell upon a weaker one, killed the males, took the desirable females, and formed into a tribe by intermixture of the blood and by combining a few smaller tribes together as an alliance. A powerful tribe quarrelled with a weak neighborly tribe, and in the ensuing battle killed all the adult males, took all the acceptable women as their concubines, spared the rest and the children to work as slaves in the land conquered and appropriated. By the tribal union, nations have been formed, the conquering tribe imposing its manners, customs, language and religion on the rest. When nations fought against each other, they gradually saw the advantage of sparing even the males of the vanquished to make them work as slaves, but generally mutilated them as the cutting of the right arm or the fore-finger, so that, they could not in future take arms against their masters, or castrated them, so that they could not beget children, they themselves appropriating the females of the vanquished. But with the spread of conquests and establishment of extensive imperial domains, the conquerors found to their advantage to spare the life and property of their conquered subjects, and were satisfied with the revenue only from the tributary chieftains who acknowledged allegiance to

the imperial power and acted as intermediaries between the people and the suzerain. With the rise of the European Powers and the extension of their domains over the rest of the habitable globe (except only a few minor sections), there have been two remarkable developments. One of colonization of the conquering nation in the land of the conquered, especially where the native population has been sparse and of low degree of civilization, appropriating their land and property, exterminating almost the natives either as a result of sanguinary warfare with superior arms or of the servitude and harassments they became subject to, or due to both reasons combined as in America, Australia, New Zealand and East Africa. The other is that of the 'dependencies,' the economic exploitation of the countries by the direct military and political control as in India, Java and Algeria, where the native populations are dense and of comparatively high civilization. But as the military occupation usually provokes revolt and resistance, and which is often costly in blood and money, a new method has been found which is more refined and subtle, but none the less effective in economic exploitation by political treaties, known under different names as 'treaty rights,' 'sphere of influence,' 'mandatory power,' 'capitulation,' 'Monroe doctrine,' and they have been with tragic effect applied in China, Turkey, Persia, Korea, Central America and the Philippines.

So it is too much to expect from human nature as it is, that the British would grant Self-government to India, unless compelling circumstances force her to this policy in her own self-interest. England perhaps

rightly regards India as the central arch of the British Empire, and if it is broken, her whole imperial structure is likely to be dissolved, and Britain would be reduced to a third grade power. India is too valuable to her. From the inexhaustible resources of the vast peninsula, she draws all the raw materials she needs, and for the consumption of the teeming millions, composing more than one-fifth of the whole human race, she sends again the finished products of her mills and factories. At India's expense she keeps a well-equipped army, consuming more than half of the revenue of the whole country. And in every war she has been engaged in, since her occupation of India, she has exacted from her a heavy contribution of men and money towards her own imperial aggrandizements.

India is verily the keystone of the British imperial fabric. Canada, Australia, New Zealand, South Africa and Ireland are self-governing countries, enjoying not only complete autonomy in their internal administration, but also, which is more important, in their fiscal policies. They are simply attached to Great Britain, for it is convenient and economical to them. The British navy protects them from foreign aggression at a very minimum expenditure than otherwise they could manage themselves independently, and the British centripetal force is strong enough to hold them together; but if that force slackens for whatever reason, the British oversea Dominions would naturally either detach themselves into independent States if strong enough to maintain and assert the right, or join another stronger Power that can protect them better.

India alone lacks representative responsible government, and consequently is inviting to British exploitation. But here Britain is under no compulsion to grant Self-government. One does not surrender his self-interest unless compelled to. Nations are actuated by motives of self-interest in their mutual relation than by sense of justice, principles of humanity or altruism. Self-interest is the motive-force of all activities, whether of personal conduct or international relationship. However it may be shrouded in refined and high-sounding phraseology, it is the '*arriere pensée*' of all human behaviour. Acquisition of wealth and power are natural impulses, and their possession is intoxicating. In ancient times, when religious fear was strong, mighty potentates could be at times induced to act according to their religious ethics, in fear of the salvation of the soul. But now a days, religious scepticism is rampant. Hardly the 'fear of God' is any longer a factor in any modern government in the shaping of its domestic external policy. No more is the administrative policy dependent on the whims and caprices of a monarch invested with sacred rights. Now it has become an impersonal, mechanical, complicated intricate machinery of vested national interests. There was a personal human touch, however autocratic might have been the king with royal prerogatives, which could be appealed to and moved, but not so the modern government, which is based on political opportunism, deriving its power from popular passions, prejudices and selfish interests. And this impersonal machine can not be persuaded to renounce voluntarily its rights, privileges and interests, because it imposes hardship,

cruelty and suffering on others. It only grudgingly grants concessions when it has to.

It is therefore futile to ask concessions from the same party, whose interest is to keep them. Imperialism feeds on spoliation. Consequently the constitutional agitation, organized by the Indian National Congress to redress the grievances of the country, was doomed to failure, except it was the necessary training of the public mind to national thinking. Passive resistance and the non-cooperation movement is likewise predestined to the same ignominious fate, for it cannot offer any effective resistance to the imperial machinery of exploitation, and make the alien bureaucracy submit to the popular will. For the virile British people respects only action, and has nothing but contempt for empty wishes. But it is a step, far in advance to that of the old congressional petitions and prayers to the government and the British Parliament. It is a self-respecting, necessary training and discipline in national thinking of the masses. It is an effective political mass-education. What was confined a few years ago to a few lawyers and newspaper men as a kind of Christmas political debate for their mutual entertainment and advertisement, has now entered into every hamlet, and roused the masses into feverish heat for national self-government, economic betterment and political emancipation. Leaders are yet few indeed. But in every great movement, it is an earnest insignificant few that blaze out the trail; masses show but passive sympathy, if not remain entirely indifferent, and a few betray the cause for pelf, power, privilege or as a path of least resistance. Yet however earnest

and serious may be the longing for a representative national government, it cannot be so easily obtained, for it comes in conflict with the interests, privileges and schemes of the ruling class. Canada has self-government, for otherwise Canada could easily join the United States and ask their armed protection. Australia and New Zealand have been colonized by the same race, and they still regard England as their 'mother-country,' are too far isolated in the Pacific. South Africa fought valiantly for her freedom, and purchased it dearly with her blood. And Ireland, though a country of a few million inhabitants and limited resources, was denied self-government, though she has fought for it a long and sanguinary war, and would have never got it, unless the British government thought it wise to purchase with it an understanding, if not an open alliance with the U.S.A.

These countries are all principally inhabited by the people of Anglo-Saxon and Celtic bloods, excepting South Africa, where the Dutch blood predominates. However they are all of Caucasian origin, professing the same religion and the same standard of civilization. Whatever we may think of ourselves and of our civilization, the fact is that the Englishman looks upon it with contempt, and regards the people akin to Negroes, who in his standard of valuation, are not entitled to the same human consideration and right of conduct, as due to a 'white man.' Yet England has not hesitated to wage costly wars with their concomitant cruelties to preserve her privileged position, and suppressed ruthlessly the national Will and banner of Freedom in South Africa and Ireland. Will England hesitate to

perpetuate thousand folds these horrors of war in India when her interests are threatened?

That is the reason, neither the armed insurrection would be a proper means to adopt to liberate the country from the foreign yoke. India is disarmed and unarmed. There is no possible source from which India can receive arms. India is surrounded on all sides by the ocean, except in the north, but which is also separated from the rest of the continent by an almost impregnable chain of the Himalayan mountain range, which is only traversable through a few narrow gorges in the north-west. These gorges are closely watched. *And to open these flood-gates for the invasion of the nomadic and semi-civilized Pathans and Tartar hordes would be to escape from the frying pan to the fire, and the bitter and terrible past experience still lingers in the memory.* And moreover though Afghanistan has now a well-organized army, the country is industrially and culturally in a backward state, and it generally imports its military supply from abroad, as it lacks yet the factory equipment and mechanics to manufacture them at home.

England has all the advantage. She is still the mistress of the sea. Modern machine guns, aeroplanes, gas-bombs are terribly destructive. A few thousand well-equipped soldiers will be able to suppress any uprising of the masses without a rallying line and adequate supply of arms and ammunitions. Time has gone when masses could overthrow an unpopular government with sticks and stones. It may be still possible against an autochthonous administration where the soldiery might refuse to shoot their own coun-

scruple to carry out the administrative orders, however cruel and inhuman they may be. If some of the simple-minded peasants refuse to pay taxes, the government will simply sell their property to others, and if there are none willing to purchase them, certainly English planters will gladly take them, and either with native labor, and if it be not available, with the Negro or Malayasian imported immigrants, with modern time and labor-saving machines will cultivate large tracts of land to great profit. The government tolerated the 'Non-cooperation Movement' as long as it remained a mere harmless pious wish. But it became dangerous, as soon as it adopted the nation-wide boycott of British goods, and the government has been since trying to suppress the agitation.

The fiscal question is really the crux of the whole situation, and the cardinal point of the popular discontent. Britain wants that India should remain only a raw material-producing country to supply the needs of her mills and factories, and Britain should sell her manufactured goods there. India badly needs to develop her own industries to employ in productive labor millions of inhabitants who can not even eke out a miserable existence from the too closely parcelled out land and exhausted soil. Agricultural land being limited, new avenues must be opened for the hungry millions, as agriculture can only maintain a part of the population. Industrial occupations are the only means left for their subsistence, as she has not even an effective voice in the administration of her own country, and all the desirable land-surface of the earth has been already distributed among the Powers. To

develop her industries, India vitally needs a high prohibitively protective tariff against imported machine-made goods, and also a duty against the export of basic raw materials. This is necessary to invite capital and to insure a good return on their investments, without which no industrial development of the country is possible, and it will at the same time employ millions of people who have hardly any means of living and are almost on the starvation diet. When India has been well-equipped with industrial machineries, and with her cheap and abundant labor, raw materials and a ready market to supply the growing needs of more than one-fifth of the whole human race, she will be in a position in a short time to produce commodities at a cheaper cost than other countries, then alone she can be a free-trading nation to her advantage. But not until then save to her detriment. India might have three hundred and thirty millions of inhabitants, but her output of labor is much less than that of New York with barely eleven millions of population. Mechanical labor is cheaper than manual labor, and one motor horse-power can perform better work with greater speed and economy than that of three men together. That is the reason why though Indian labor is cheaper, the Lancashire mills can produce cotton goods and sell them cheaper in Indian market than the people can produce with their manual labor with primitive spinning wheel at home. The recent attempts made to revive this spinning and weaving home industry may meet with failure as a competitive factor either in the home or the world-market, unless public sentiment strongly supports the movement, thus to give a means

of living to fellow beings who otherwise for want of occupation are miserably starving to death. The recent proclamations of boycott of British goods, especially of cotton-cloth, is but an indirect temporary means of popular support of the home industry, to act as a protective tariff which a self-governing Indian would have otherwise imposed. Machines cost money. Indian capital is limited and shy to be invested in spinning and weaving machines and factories without protective duty in competition with Lancashire, where the industrial machinery is well-organized on a gigantic scale, increasing productivity and improving quality by installation of the newest of mechanical improvements, thus eliminating waste and reducing operating expense, and which has the further advantage of the easy availability of trained mechanics and mill hands. U.S.A. which has all the advantages in superabundant supply of capital, machines, expert mechanics raw material and a ready market of 110 millions of prosperous people, still levy 40 P. C. duty on imported cotton goods to protect the industry. India needs much more, as it not only lacks capital, but also the facilities to manufacture the necessary machines, it has to import. There may be some who think that big mills may not solve all the unemployment problems, before new readjustment takes place between the urban and the rural population, as the majority of the agricultural people when the harvest season is over, are forced to remain idle for lack of any occupation. May be by the hydro-electric development of power in the Bombay presidency, Cashmere, Mysore, in the lower Himalays and

Assam, sufficient motor power can be supplied to utilize time and labor saving appliances on sound economic basis. Undoubtedly the cottage industry with hydro-electric motor power and modern contrivances is much superior to the factory life, and much more conducive to health, personal dignity and independence of the workers. Therefore water-power should be developed by all means possible, wherever available and practicable. It is cheaper than the power generated by coal, though the first installment expense is higher due to costly machinery, for each ton of coal dug out can not be repalced, while the 'white flowing coal' is inexhaustible.

As to the argument advanced by some that the high protective traiff will only benefit the profiteers who would advance the price of the commodities, and the poor classes are likely to suffer more as the consequence, much need not be said, as its fallacy is apparent. For rge profit would automatically draw foreign capital or investment, thus causing intense domestic competition, which will as a reaction check the soaring profit, at the same time giving employment to millions of people who are suffering from chronic unemployment. And moreover it will cause a healthy circulation of money in the country.

And the protective tariff will by no means in the long run, prove injurious to the British trade. For a prosperous India would have a greater buying capacity, and she will purchase those goods she can not manufacture at home from Great Britain, and with a preferential tariff arrangement between both countries, it will benefit both nations alike.

For Britain should bear in mind that repression can never crush a national movement, rather it adds fuel to fire. Whatever may be the faults of the Indian people—and they are many, they never have been and they are not morally cowards. India yet lacks political consciousness. The people have not yet learnt to act collectively, and the strength of mass movements and organization. They have been rather individualistic than nationalistic in their tendency. But once patriotism becomes a passion and a religion, India is capable of showing the highest sacrifice and noblest martyrdom. Prison or gallows can never daunt the Indian soul, nor frown or threat will ever deter her from what she conceives to be her duty. There is still a soul-force in the mass element which is above corruption. By arresting a few leaders who give an articulate expression of the vague mass discontent and grievance, and who rather exercise a moderating influence over the popular indignation against the economic suffering, the government instead of suppressing the movement would possibly bring precipitation of the mass action, leading to riot, chaos, disorder and anarchy. It is the Indian masses that are inflammable, and the leaders do but express their faint sentiment; and thereby control them. And when this sober restraining influence would be lacking and the mass conscience is roused, it will be an evil day for the British Empire. For though the Indian populace is usually good natured, patient, forgiving and stoic, yet it is capable of a good deal of ferociousness, when the feeling is roused. The old-fashioned imperialist might calculate that as a protest against the repressive measures, when violence

shall manifest itself, there will be sufficient excuse to crush the whole movement, gag the press, repeal all the reform laws, and all unrest will disappear under the heavy heel of the iron rule. In the intoxication of power and possession, the imperialists are easily apt to forget the lesson of history. Partly it might succeed to suppress the outward manifestation of popular discontent, but it is bound to drive it deep under ground. And if secret organizations take deep root in the Indian soil among the masses, they would not lack in time the effective applications of modern guerrilla warfare, as explosives, bombs, dagger, poison, destruction of rail line and bridges, thus completely paralysing the administration.

Moreover though Great Britain has won recently a great victory, is at peace with the Great Powers, yet all the rivals have not been eliminated. If one has been beaten, others have arisen in her place. International conduct of a nation is not regulated by treaty obligations, but by national economic interests. And whenever they clash, whether they are friends or foes, they will fight to the finish for economic supremacy. France is already consolidating her continental position as the arbitrator of Europe by her military strength and treaty alliances, and if she possesses a strong submarine flotilla, she will easily hold the key to the Mediterranean, and by helping the Turks to come back to Europe, she is trying to take the place of Germany as the protector of the Moslem world which is already in ferment and restive against British domination, thereby almost throwing an indirect challenge to the British Power. Japan aspires to the domination of

the Pacific and the Asiatic trade and the raw materials, if not the political hegemony. And Japan is beating her Western masters in shrewd diplomacy. The Anglo-Japanese treaty renewal was a recognition of the fact that Japan was capable of doing a good deal of mischief, if she was not made a partner of the imperial loots. If Japan publicly comes forward as the champion of Asiatic liberty with the doctrine of self-determination of 'Asia for the Asiatics,' and supplies the Asiatic masses with arms and leads them against their white oppressors, the whole of Asia would be aflame in a day, and all the imperial systems would likely be drowned in blood, destruction and carnage. Hence perhaps the Washington Disarmament conference was called to curb, if not to isolate the rising power and ambitious designs of both France and Japan, by creating friction between Germany and France on one side and Japan and China (Korea) on the other. England is already building and fortifying a strong naval base at Singapur. Of course Japan is not yet in a position to challenge the Anglo-Saxon Powers as long as they act in concert. But Australia and New Zealand are fearful of Japanese encroachments by her dominant position in the Pacific, and as Great Britain did not think it prudent to openly antagonize Japan, hence the four-cornered Treaty or Pact of Washington (1921) to make Japan 'keep good conduct.' But treaties have been respected more by their violations than by their observances, whenever it has suited the self-interest of a powerful nation. The money market has been shifted from London to New York, and the U.S.A. has a powerful navy, building a huge merchant marine,

and its well-equipped industrial machinery needs an ever-extending foreign market for the disposal of its output. The old generation that has loved and idealized English institutions, prided in English descent and regarded sentimentally England as their mother-country, is rapidly passing away. The new generation is materialistic and burlesque. The control of the national politics which has been hitherto in the hands of the New England or the Southern States which have had some sentimental regard for England, is gradually passing into the hand of the Middle West, which are principally inhabited by Scandanavian, Germanic and Irish stocks, who are more or less anti-British. Bolsheviks in order to consolidate their power, and to counteract the aggressive policies of the Western Powers against them, are appealing to the Asiatic masses, to overthrow their foreign rulers, and in the frenzy of new proselytism of their fantastical, wild utopian theories, are raising a threatening storm-centre the central Asiatic plateau, which might easily spread over the borderland, provoking social disorder, industrial stagnation, economic confusion, business dislocation and paralysis of normal exchange of commodities. Germany is like a seething caldron. A terrible protracted war, a disastrous peace, and especially the debasement of currency, and French aggressions are dragging Germany slowly but surely to the vortex of Bolshevism. Whatever might have been the motive of currency inflation, either by the pressure of indemnity payment of the short-sighted and vicious Versailles Treaty, or to defraud the allies of their indemnity or to pay them with their own money with a nice commission

as bargain,* it has undoubtedly pauperized her nobility, the industrial magnates and the middle-class. And the nobility and the middle classes having lost everything they had, they will have no objection soon to join the Bolsheviks, and lead the whole movement by their scientific training, intelligence, organization, discipline and central European position. With a solid flaming red mass of Germany, Russia and Turkey, the civilized world may be violently shaken by a sudden and violent eruption, the lava flow spreading not only in Europe but far and wide. And Germany having lost and Russia having renounced their colonial possessions and privileges, they will have no hesitation to foment rebellion in the colonial possessions of their enemies, to bring out a world revolution.

* Germany since the armistice has received from U. S. A. nearly two billions of Dollars, from England about a billion Dollar, from France about half a billion Dollar, and from the rest of Europe nearly a billion Dollar, by selling her paper currency and municipal bonds, the price paid for the Mark ranging from 5 cent to one-fourth of a cent, and by the rapid inflation of the currency, they have been now made practically worthless, while Germany up to this time has not paid to the Allies more than 350 million Dollars. But if Germany wanted to roast her pig in other people's fire, she has thereby burnt her own house. Though the industrial machinery is intact, its mechanism is being dislocated, and national life paralyzed. For with a rapidly depreciated currency no business undertaking is possible, except on the principle of primitive barter; as before the day or the week is over, the cost of the raw material might soar higher than the value of the manufactured good at the market price. And consequently the German old order of economy, saving, intelligence and discipline is fading away like the sun-set.

The British interest being world-wide, the points of collision are also numerous. In future whatever nation expects an armed conflict, will not fail to cooperate with the Indian revolutionaries to provide them with arms, so that England may be hit at the weak point of her armory. Germany learnt it to her bitter experience only when it was too late, as thousands of Indian soldiers were rushed to the battle fields of Flanders to turn back the German tide of victory. But in peace time in spite of all vigilance of the British navy and the secret service, if a first class power undertakes to cooperate with the Indian revolutionaries and to provide them with arms and ammunitions, and if Germany and Turkey join Bolshevist forces, the area of the fighting zone will extend to the Indian north-western frontier, and serious mischief can be accomplished, if it does not prove entirely fatal to the British Power. But a contended and a happy partner of the British Commonwealth of Nations, India would on the other, and be a very valuable asset, by her geographical position, inexhaustible supply of men and materials.

England must realize that India can not be ruled any longer with empty phrases against the good-will of three hundred and thirty millions of people. Her magistrates treating every leading protestant against the British misrule as a potential rebel and punishing him with a heavy imprisonment, as a court-marshal drunk with an overwhelming victory over the armed insurrectionists, imposes upon them revengefully almost life-long sentences as an effective means of their elimination, instead of blowing them with guns which might provoke strong indignation and make bad

impression on civilized public opinion, are certainly creating an insurrectionary spirit which it is meant to prevent. The Indian government is committing a serious blunder by arresting and imprisoning the leaders of the non-violent non-coöperation movement, on the ground of preserving 'law and order.' In the name of law and order, a government can not expect public acquiescence of tyrannical and arbitrary measures, in the frame-up of which, the representatives of the people have had no voice, and which can not command respect and appeal to the conscience of the thinking classes, and which the majority of the people believe, were enacted to preserve solely the interests and the privileges of the Britishers to the detriment of India. History has amply testified that the government that forfeits the respect of the majority of the population, especially if it is an alien bureaucracy, can not last long.

And a few concessions made in time have a magic power of soothing irritability than many more given grudgingly, when it is too late. India being very sensitive to world's democratic attitude, this reconstructive program, if followed, safe-guarding at the same time, the imperial defences and integrity, will be likely to make a firm ally of the British Power, and are sure to benefit both nations :

1. The military control is to remain in the British hands, but the military expenditure is not to exceed 15 p.c. of the Indian revenue. However if more is required, it must come from the imperial defence fund and from the British tax-payer.
 2. The British parliament is to nominate a representative or Viceroy for seven years, who will act as the
-

president of the Indian National Legislative Body, composed of the representatives of the people, one representative for a million population or twenty thousands of urban population, the electorate being all persons who have attained their majority and have certain educational qualifications.

3. For administrative purposes, India is to be divided into five provinces on linguistic principle, enjoying complete autonomy in their internal management :
(a) Hindustan proper for Hindi speaking people ;
(b) Bombay Presidency for Marhathi and Gujrati speaking people ; (c) Southern India for Dravidian and the Ceylonese ; (d) Bengal, Behar, Orissa and Assam for the Bengalese ; (e) Burma for the Burmese.
4. Each province is to be divided into districts for nearly each million of its population. And each district to be divided into as many communes (villages) according to the community interests and physical situation, as consistent with their internal autonomy and national integrity.
5. Each commune shall enjoy complete freedom in its internal administration, and shall govern itself by elected officials by majority of votes. But the taxation shall not exceed 10 p. c. value of the average neighboring land. And in any dispute, either civil or criminal, the unsatisfied party will have the right to appeal to the superior courts, over the decision of the local judges and juries.
6. Candidates for offices as Mayor or Magistrate must possess necessary qualifications consistent with the efficiency of the office, and before they can

appeal to the electorate for election, must have their fitness certified by the Provincial Supreme Court. The Mayor of a village must pass a civil service examination, the course of study consisting of history, geography comparative religion, rural and social hygiene, and law ; the Mayor, of a town and the magistrate shall in addition study civil engineering, city-planning at least one year in one of the well-recognized foreign universities, and shall get personal practical experience of the municipal administration of five metropolitan cities of the world. The elected magistrates and mayors of the cities above 20,000 inhabitants, shall sit also in the National Legislative Council and the Provincial Assembly as the authorized representatives of the people, and by two-thirds of their votes, the Laws shall be enacted. The National Legislative Congress shall enact all the civil and criminal Laws, and shall nominate (1) Minister of Commerce and Agriculture ; (2) Minister of Finance ; (3) Minister of Education and Archeology ; (4) Minister of Justice ; (5) Minister of public Health, who will be responsible for their conduct to the Representative Assembly. The Provincial Council shall have no legislative power, but will be entrusted with the Provincial administrative measures and duties. The National Minister of Commerce shall enforce the Custom Regulations and the Tariff, and the inter-provincial Communications, as railways, telegraphs and harbors.

7. If within a province, there is more than one important linguistic group, each group shall have

the right to have an Educational Department of its own, to teach within its territory in the public schools its own language, to establish an university to foster its culture and development; and the language shall be the official language in courts and public place.

Of course, it goes without saying, that this is but a rough sketch, and it will need a thorough revision, before the British parliament grants self-government to India and the Indian public opinion accepts it through compelling circumstances, which no one can yet prophesy, in its application on working basis. But one thing is sure that no Constitution which will not grant full liberty of the press, speech, religion, fiscal autonomy, personal movement and property, can be acceptable. They are the fundamentals of Democracy.

The question has been often asked whether India is yet fit for an experiment in democracy. She is not a homogeneous people, but consists of divergent ethnic stocks, which have not yet been fused into a national mould of race consciousness, common language, religion and culture, but they lie almost separate from each other, stratum upon stratum, each group living its own life, tribal customs and morality, superimposed by Indo-Aryan culture. The whole social fabric in India is based on privilege of caste and creed. Individually Indians may be capable, but they yet lack organizing genius and experience of collective responsible undertakings. Her native kings and rulers are autocratic in their disposition, tempered only by religious fear, traditional and social ethics of conduct, and they rule

their territories with no other constitution or representative council than the antiquated traditional fashion, tinctured with personal whims and caprices, regarding the kindoms as their personal property, basing yet the claim on the hereditary right of divine dispensation, and they squander the state revenue on their personal pleasures and luxuries. And the Native States are misgoverned, and they are least progressive, full of graft, corruption and favoritism. The civic body suffers from anemia; the public spirit lags, and hardly is there any stimulus to industrial development and cultural progress.

It must be admitted that there is a certain truth in these statements. The political form of government is but an outward expression of the inner vital force of the social body politic. A democratic form of government is unworkable, unless the social organism is democratic in its fundamental essence. Or soon corruption, bribery, favoritism and privilege will make an empty mockery of the outward republican form of government. India must realize that though freedom is the natural longing and ideal striving of the human soul, it is not yet within the practical range of politics. The form of government will matter very little, if India can secure a sound economic basis and fiscal autonomy. India within the British Commonwealth of Nations would be much better off than the fictitious autonomy of China or Persia. And the tribute India would have to pay to England in the form of salaries and military expenditure, will be certainly cheaper in comparison to the security and protection from external aggression and internal disorder India will enjoy as a

component part of the British Commonwealth. And the pressure of the British domination is likely to fuse all the divergent ethnic stocks, and to improve the organic health as a reaction. For it should be remembered that we are not only victims of foreign exploitation, but also of a chronic internal malady. The foreign parasitic exploitation is only possible for our national organic function has been weak and debilitated. Early marriage, caste, ignorance and superstitions have sapped our national vitality. It is but a half-truth to say that native kings are unprogressive, for they are but passive instruments in the hands of reactionary British Agents, who virtually dictate all their policies behind the screen, and the Maharajas enjoy less freedom of movement and action than many of their humble subjects. And if any one cherishing an idea that some of them would emulate Victor Emmanuel to emancipate the country, it is but a vain delusion. We must not lose sight of our ideal. If our native kings fail in their duties, to act as the father of the people, as enjoined in the Dharma-sastras, they have no right to immunity from criticism. And if their ways can not be mended, responsive to the representative government, they must be brought to submission by the same means as the British Indian government to the national Will. In the meantime we must rejuvenate our National Vitality by infusion of new blood through inter-caste marriage on eugenic principles, gradual abolition of caste and creed barrier, prohibition of alcohol, opium, nicotine and prostitution, and the wide-spread of modern education.

NATIONAL PROBLEMS.

I.

INDUSTRY.

Productive industry is the source of wealth of a nation. Wealth does not consist of hoarded gold, silver or precious stones, as it is commonly supposed, but of creative activities and occupations of its people. Gold or silver is simply a standardized unit-value, as a medium of exchange to facilitate business transactions. But this medium may be easily substituted by any other stable and mobile unit of value, without dislocation of business, or impoverishment of the country, as long as the people are occupied in gainful and productive occupations. If rich and extensive gold or silver mines of concentrated ores were discovered, or they could be synthetically manufactured, out of base metals, at a very low price, this would not materially affect much a well-organized industrial nation, for the products of the farm, mine and the factories can be with equal facility bought and sold with any other non-fluctuating medium of exchange, as long as its mechanism is in healthy and vital condition. Gold and silver are certainly less useful (and can be easily dispensed with) than iron and copper, and they have been hitherto the basis of currency, only because of their rarity, and as their mining is very expensive, leaving but a very

narrow margin of profit and not certainly much more remunerative than in many other industrial activities, and their production is almost balanced by the loss incurred in fine arts and industrial processes, a somewhat stable value is maintained. But this value is artificial, and not based on any intrinsic worth or usefulness to the community or the industrial life of a nation. In spite of a large gold-reserve, a nation may be facing financial disaster, economic ruin and national degeneracy if its fields, mines and factories remain idle, the wheel of production and distribution stops, or measurably slackens, and there is increasing unemployment. The real wealth consists in the full development of the natural resources of the country, and the engagement of the people in productive pursuits. The country must produce all it can from its fields and mines, with the most modern time and labor-saving appliances. And the factories with up-to-date machines should convert the raw materials into finished goods at a minimum cost of labor for its domestic needs, and export the rest to foreign markets, which it can not utilize at home, in exchange for raw materials and manufactured goods, which it can not profitably produce at home. For a nation can remain no longer an isolated unit. It must compete with other nations in the open market, and if its farm products and manufactured goods are not cheaper in price and superior in quality, unless it has a monopoly of the market, or, of the products that are indispensable, it certainly can not capture, and will not be able to hold the foreign trade, and thus to employ in productive and gainful occupations, those who otherwise would

remain out of employment, as domestic needs may not be sufficient to engage the labor of all. And though domestic market can be protected from foreign invasion by a high and formidable tariff-barrier, and though it may be essential to do so to encourage production and industries and to support them thus in the infant stage of their development, still it can not be a permanent policy, as it will do the nation a great harm, if these infants are kept perpetually helpless, and the protection does not become a stimulus for their further growth into sturdy manhood, so that they can be depended on to fight their own battles mainly on their own merits with the rest.

Agriculture : Agriculture is the basic industry of the country. It is the source of livelihood of about 95 p.c. of the people. Yet it has been suffered to remain in a very primitive state. Hardly any fertilizer is used to renew the soil and to supply the mineral needs of the plants. And the consequence is that the production per acre is less than one-third of any country that uses modern methods. It is true that fertilizers are expensive, and the poverty-stricken farmers can not afford such an extravagance, paying an exorbitant rate of interest to the usurious money-lenders, from whom money has to be borrowed for such a supply, as they can hardly save anything, and accumulate capital enough for such a purpose, being virtually mortgaged ; but such an investment is not only profitable to the farmer, but vital to the welfare of the country, if thereby the production could be trebled or quadrupled, the labor and the cost of the seeds being the same. This can be easily done by

Cooperative Farmer Banks, under government control, which will not only supply the money needed, but will also distribute seeds raised on model Farms which will teach the neighborhood how to use modern methods with good results, and rent the machinery by turns which are too costly for the farmers themselves to buy. The Government must realize that a prosperous farming population is a safe guarantee against revolution and anarchy, and a sure safeguard of Law and Order without which no progress, nor, stable administration is possible.

Against the adoption of motor machines in farming in India, it is often said, that the agricultural area has been so closely parcelled out that the individual farmsteads are too small for machines to be profitably utilized, labor being very cheap. But if by machine power the products could be increased or produced cheaper, it becomes necessary then that Indian agriculture adopts the new method, or it will suffer disadvantageously. Further parcelling may be arrested

a new inheritance Law that all immoveable property should be inherited by the eldest son only and other children should possess the right of equal share of the moveable property, and support and education up to 25 out of the income of the farm-proceeds. For the highest production at the minimum cost of labor, communalization of all arable lands, and grouping the people of the locality in a barren or hilly tract where civic hygienic measures, water-supply, light, fuel and modern educational facilities can be most advantageously and economically provided for them, seems indeed a very alluring theory, but how far it will succeed in practice remains to be seen ; for the public administra-

tion in all countries, either in a monarchy or in a republic, has proved hitherto, extravagant, inefficient, venal and corrupt.

The feudal system that still prevails in India, must indeed be abolished, as it can not be defended and tolerated on any principle. The days of feudalism and absent land-lordism are gone by. It is immoral in principle, and disastrous in its consequences. It has been sapping the national vitality, arresting development, retarding progress, and keeping society moribund and reactionary. In this democratic age, the spirit is against serfdom and lordship. The land belongs to the man that works for it, and not to the person whose forefather might have received it by betraying and surrendering the rights of the people, by abject service, ignoble flattery or treachery, from a despotic ruler or an alien conqueror. It is true that private property should be held inviolable, for without it no progress is possible. Communism robs all impetus to activities, exertions and inventions, for the simple reason that no one will work harder than is necessary for his bodily sustenance if his savings are not secure, and can not be transmitted to his loved ones. But the land and the mines belong to a different category. They have not been created by any individual exertions. The arable land should belong to the people who have been working and developing it for generations and the mines to the State. The Zaminder class is simply parasitical. The Zaminders do not till the soil, nor add any improvement to it, but simply take a portion of the produce to which they are not entitled, acting as an agent of the Govern-

ment for the collection of the taxes. The farmers can pay taxes direct to the Government, thus eliminating this idle parasitical class, and undue waste. Nor should the taxes exceed about 5 p. c. of the net income, or about 8 p. c. of the gross produce. In Russia the land is being distributed among the peasants ; in England as a foreboding of the coming storm, the large estates are being parcelled out and sold to individual owners. It will be well for India to follow suit. For the Russian Revolution is bound to bring about world-wide changes, in more or less modified forms, according to the impact of reactions, in the relationship between the land-lord and the tenant, just as the French Revolution changed the Constitutions of Europe.

It is possible that in a primitive society, the chieftain was a powerful warrior and a magician. He later became priest-ruler. With the advancement of society, for the sake of efficiency, the priest and warrior classes become distinct and separate. In the first stage the magician warrior ruled supreme over his fellow men, by superior might and magical tricks, and the sceptre still remains the emblem of sovereignty—the sceptre which is nothing else but the refined and ornamental wooden club of the cave-man with which he brought into submission his fellow men and ruled them. In a later stage the king had to share his power with the chief warriors and leaders who became the feudal lords. The French Revolution wrested the power from the feudal chiefs, and vested it in the upper middle-class. The Bolshevist Revolution is trying to invest the working-class which forms the majority of the population, with this power.

for the administration of the country. In a broader sense it does not imply any radical reconstruction of the society, for the majority of the population are workers, either manual or intellectual; and the landed aristocracy which lives every where parasitically on the social organism, has hardly ever contributed anything intellectually and morally to human progress, and especially in India they are reactionary, vicious, self-centred and arrogant. Their loss of power can not therefore necessarily lower the intellectual level of the country. And it is the cultural and intellectual acquisitions of a race, that are of fundamental worth, the rest being ephemeral. And though excessive poverty is depressant of intellectual life, a little poverty on the other hand is its stimulant, as want is the mother of all inventions. It is true that the phenomenal progress of Europe in the last period of the nineteenth century and the first decennium of the twentieth century, is in no small way owing to the fact, that the previous generation accumulated sufficient capital to give their children necessary leisure and education. But it was done by the upper middle class which has never been very rich, but always adventurous, resourceful and intellectual, and not by the landed aristocracy which has been indolent and spent their easily acquired money in luxury and corrupting licentious orgies. Easily acquired money indeed is very apt to corrode the moral fibre and sap the intellectual vigor of individuals any where.

Since the very earliest forms of life originated in water, and were composed in large measure of it, we can not conceive of any form of life which can live

and thrive without water. And particularly plant life and growth require a good deal of water. In localities where rain is not dependable during the period of plant growth, or there is insufficiency of it, irrigation is essential for the agricultural development of the region. Drainage is needed in soil saturated with excessive moisture, except for the cultivation of some kinds of rice which can thrive in a good deal of water. It is truly a lamentable fact that in the latter part of the rainy season in many of the rivers there is flood, and many of the villages and fertile fields are laid waste by the inundation, almost annually, yet in the summer there is scarcity of water even for drinking purposes in the very same regions. This can be easily remedied by digging artificial lakes in suitable localities, and connecting them with the river by canals, and when the river rises above a certain level, and is likely to prove disastrous to crops and neighbouring villages, the river may be relieved by sending the flood into the lakes through opening the sluices; and when the drought is threatened, the gates can be opened and the volume of the stream reinforced by the water stored in the reservoirs. In a thickly populated country, almost annual inundations with the consequent damage and destruction of crops, cattle and dwellings, are inexcusable in a modern age. It clearly indicates lack of civic sense of duty, co-operative plans, concerted actions, and executive ability.

Coal and Iron Industries : Coal and iron are the basic and the key industries of mechanical enterprises. Without fuel, no power can be generated. Without iron no machinery can be manufactured. Without

either of them, industrial activity would come to a standstill, and modern life is inconceivable. Fortunately, for India, extensive and rich iron ores and coal deposits are found in close proximity to each other in Central and Eastern India. The full development of the iron and steel industry in India is not only of vital importance to economic progress, but it will also benefit England, as the British high-grade iron-ores are practically exhausted, and they have to be imported from Spain and Scandinavia. But it is imperative that this infant industry receives the protection of a high tariff for its growth and development, as India lacks capital, machineries, mechanics, and capital would not be forthcoming unless there is an assurance of lucrative profit. This industry should be also encouraged by making it compulsory to purchase the military supplies and railroad equipment in India, by manufacturing them in the country. Only the surplus steel output beyond India's needs may be exported to England with preferential export duty. England should realize that the strangulation of Indian industries has been a deplorable mistake of British statesmanship. A contented India would be a valuable asset to the British Empire, and not a dangerous liability as it stands to-day. And moreover commerce can not be fostered by bayonets. Economic imperialism has been a sad failure. England has more trade with U.S.A. or Argentine than with any of her colonies or protectorates. Statistics refute the fallacy of economic benefits in a trade balance of imperialism. The debacles following the Versailles Treaty are clearly demonstrating that economically ruined Germany can not pay the indemnity imposed on

her, but is dislocating the trade machinery of the world and is leading Europe to economic ruin and financial bankruptcy. By robbing one's neighbor, and paralyzing his productive industry, the community does not become richer, rather impoverished. The human economic fabric is too closely and intricately interwoven, and the disturbance in any part reverberates and affects the whole of it.

The Cotton Industry : The cotton industry has a vital importance to the economic prosperity of the country. India needs annually millions of yards of cotton cloth, which is now mainly covered by importation from Lancashire. India produces a good deal of cotton, which is mainly exported to England, and which comes back in the form of manufactured goods, following the imperial policy of economic exploitation of buying raw materials cheap and selling manufactured goods dear. And India suffers in addition a grave and inexcusable injustice, that instead of her cotton manufacturing receiving a formidable protective tariff, has to pay, on the contrary, an excise duty, so that the British manufactured cotton fabrics can compete favorably in the Indian market. It may be that a forbidding duty on cotton goods might cause some loss to the Lancashire mills, but Britain is rich, and can find another market, and Indian fiscal policy should be shaped to the best interest of India. It will give employment to hundreds of thousands of people, if not millions, who are now hardly finding means of livelihood. If electric power could be introduced in country places, and this can be easily done by extensive hydro-electric development, the farming population

would be immensley profited by having motor-weaving machines, so that their leisure-time could be well-utilized in the production of a useful commodity. But certainly handlooms can not compete with modern machines and the 'Charka movement' is bound to prove a failure in the long run. And the acreage of cotton plantation can be immensely increased by extensive development of irrigation in Sind and Rajputana, and drainage in Bengal where jute is now produced to the detriment of the health of the people. For jute has to be kept under water to loosen its fibres from the stalk by decomposition which pollutes drinking water, and the stagnant water with rich organic matter becomes the favourite breeding places for mosquitoes. The seeds of the cotton too, yield an excellent edible oil, and oil cakes are good fertilizers.

Hydro-Electric Development : Water-power should be developed in India, and its full utilization is of vast economic importance to the welfare of the country. In Cashmere, in the Himalayas and the sub-Himalayas, in the Western and Eastern Ghats, Nilgiris, in the Vindhya Range, Assam, Ceylon and Burma, there is an immense source of water power, which ought to be fully developed for mechanical energy, for light and fuel, and especially to foster cottage industry which is badly needed, to engage in productive activities in idle hours and seasons, for the rural farming population which eke out a miserable existence from the soil. It will, also, modernize rural life by supplying light and fuel, in convenient form, thus adding comforts to life.

Transportation : Transportation facilities in India are poor and inadequate. In a thickly populated

country, nearly half the area of U. S. A., the railway mileage in 1918 was 36, 333, and per 10,000 population 1. 15 miles only while in U. S. A. for the same year there was 253, 529 miles, per 10,000 population 24. 02 miles. The river transportation also, which does not need much capital outlay, is very poor. The river beds are generally silted, and they are hardly dredged (except in the lower part of the Hugli), deepened and embanked. The river communication with extensive canalization ought to be rapidly developed to transport heavy cargoes at low cost. The entire Gangetic valley can be covered with a net-work of canals even for vessels of heavy displacement. The roads are also few and badly kept, and they become simply muddy sloughs in the rainy season. The country needs a large number of grand trunk roads and canals, connecting rivers and railways.

Cattle-breeding: The last Indian cattle census (19-1920) enumerates about 146 million heads for 318 million people, while for 110 million people of U. S. A. there are about 205 million heads, of which the milk cows alone are estimated at 23, 749000 head, and other cattle 44,485000, sheep 48,615000, swine 72,909000 and horses 21,109000 (1921). India which boasts of having a high consideration for animals, especially for cows, has miserably poor milk-yielding cows of inferior breed and physical appearance. And milk is inferior in quality and higher in price in Calcutta than in New York, London or Paris. India vitally needs to augment and to improve her cattle, especially to increase the yield of the milk of the average cow. Milk is indispensable for the young,

sick and the old, and is a valuable food for all, especially for the vegetarians who form the majority of the Indian population. And when the animal is taken care of, and is free from disease, it is an excellent, nourishing and stimulating article of food. There is a prejudice against beef among the Hindus, and pork among the Mahamedans, and this adds immensely to the food-value of the agricultural products. Apart from humane considerations, there is no valid reason against the use of either beef or pork. The beef-fibre is not necessarily tougher than mutton, nor is its fat more calorific than lamb-fat, as it is commonly supposed, but on the contrary beef-fat is easier to digest. Pork has a bad reputation, as some swines are found infected with trichina, and the eating of the raw or incompletely cooked meat of the infected animal might provoke 'trichinosis.' But the consumption of any infected vegetable food is dangerous, and pork can not be any exception. Neither is the swine by nature dirty nor does it love unhygienic surroundings; it can be kept as clean as any other animal with hygienic care and feeding, and it is very prolific. Where there is no objection and the supply is more than the demand, these valuable food-resources may be utilized to the utmost, as a majority of the population chronically suffer from mal-nutrition, and their diet is usually deficient in protein.

Fisheries: Fish is an important article of food. It can supply cheaply the protein ration which is usually deficient in the Hindu diet in a pleasant digestive and assimilable form. Many of the fish have a delicious taste, and many of them are rich in easily

assimilable oil. The non-edible species can be also used for pressing oil from them, and using the remnant as a valuable fertilizer. Yet fishing is in a neglected state. Hardly is there any sea-going fishing flotilla with modern equipment, though the sea abounds in fish, and fish is awfully expensive and is getting every day beyond the means of the lower middle-classes, especially in the cities, and in Calcutta it is dearer than in London or Liverpool. Though fishing is a well-established industry in Bengal rivers, it is done without training and knowledge, and not only the young fish, but even the spawn and the fry are not spared, thus rapidly depleting the source of supply. To increase the fish-supply selected fry should be regularly and abundantly supplied to rivers, canals, lakes, marshes and tanks, and all voracious fish-eaters as dolphins, poises, sharks and others of the kind should be systematically destroyed. The catching and selling of young fish, fries and spawn should be punished, and for the marshes, canals and artificial tanks larvicidal fish should be liberally introduced to destroy mosquito larvae, as they are laid in stagnant water, and they are the causative factors of malaria. An aquarium should be established in every important fishing district, to study the habits and behavior of fish, to hatch the fry and to distribute it.

Forestation : Deforestation is one of the main causes of aridity. It is supposed that the upper part of India, Turkeystan, Punjab and the Deccan which are now more or less in an arid or semi-arid condition were in the epic period covered with a dense forest. Probably the forest was burnt for the pasture of the flocks, and

the cleared land was used for agriculture, and the deforestation has eventually brought the desert and the semi-desert condition that prevails there to-day. The crowns of the trees intercept the rays of the sun, the air-current and the falling rain ; the former prevents the desiccation of the soil and the latter tends to prevent denudation, erosion, landslips, silting up of rivers and low-lands. The leaves, flowers and fruits, and other plants growing in the shade, falling on the ground form a layer of humus, which protects the soil against rapid changes in temperature, reduces the temperature of the air and the soil to a moderate extent, reduces evaporation and radiation, renders the climate more equable, increases the relative humidity of the air, favours its precipitation, moderates to a large extent the movement of water, and thus helps to regulate the water-supply by preventing violent floods, and the flow of water in rivers and springs more continuous. The roots of the trees also penetrating deep into the soil in all directions, bind it together, and consequently prevent landslips and avalanches. The conservation of forest is now an acknowledged principle in all States, for its favourable advantages over the climate, continuous feeding of the rivers and springs, and particularly for its products, as a source of wealth and revenue, especially for its timber. But it should go beyond that. Dates can be planted in an arid soil, and where that is not possible cactus. The banks of canals, embankments, on the side of the roads, streets, railroad tracts and on hills and mountains, fruit plants, medicinal and ornamental trees of economic value, indigenous and imported from other countries and suitable to the climate, should

be systematically planted. This, also, applies to the forest preserves where trees of inferior kinds should be cut down, and the ground planted with those of superior varieties, to be selected for their economic value, fruits and for beauty. All the sidewalks of the cities, small or large should be bordered with fruit plants, ornamental and medicinal trees. They not only give shelter from the sun and the rain, but they are also refreshing and reposeful, and add charm and beauty to the landscape.

Capital and Labor : Liquid capital is a condensed form of value, which can be converted conveniently at will into any form of energy. It can purchase brawn or brain as needs be. Capital is the embodiment and expression of the saved surplus product over the current expenditure of energy for its production. However the accumulated saving, though it represents surplus or over the immediate bodily needs, represents much of the intellectual comprehension that such a saving is of some fundamental value and can be exchanged for other needs. One can drill a hole on a rock, and spend a good deal of his energy for it, but it represents no capital unless it can be utilized for some useful purpose, giving an economic return. A horse has three times the energy of a man, but the product of its work is no capital for it, but for the man who makes it work for him. From this it can be easily inferred that without intelligence behind it, mere labor itself has no value. And machines are displacing crude, manual labor rapidly. In New York State alone there is more machine power than all human beings of the world put together could perform. So intelligence and labor alone are not sufficient in this modern

age in producing the maximum result, unless supplied with up-to-date machines and tools. Each machine represents capital, that has been saved and formed into an agency which assists man in his labors and so largely increases the product of his industry. In India seven and a half times more people are engaged in agriculture than in the United States, yet in the United States eleven per cent more acres are under cultivation than in India. With only thirty per cent of its people on farms, the United States produces a very large surplus of food for export, much more than India does, because an American farmer cultivates nine times the area an Indian does. The difference is due to the extensive use of machinery to till the soil, to spread and mix the fertilizer, plant the seed, cultivate the growing plants and harvest the crops. Great machines reap the wheat, thrash and clean it, measure or weigh it into bags, tie a string round the top and leave the filled bags of wheat behind him as the farmer passes over the field. In textile and other industries, the importance of machines is even greater. The function of the worker to-day in a modern factory has been almost reduced to watching the machines do the work. Though manual labor is yet indispensable, yet where the worker is exactive, his service is being reduced to the minimum with the development of machines. However the best results are to be had with the harmonious working of capital, intelligence and labor. The laborer must realize that without capital and intelligent direction his work is practically of no value. The miserable Central African pigmy works from sun-rise to sun-set, but only in picking berries, roots, fruits, worms and

insects for his bare existence, and gathering a few leaves and branches of trees for his shelter at night. While a modern proletarian working a less exacting task 8 hours a day, enjoys more comforts and luxuries and educational advantages than the Pharaoh enjoyed in his palmiest day. Capital or machines do not debase labor. If by the development of motor power and improvement of machines, the working force is being reduced in number, it creates other multifarious avenues for their employment. So, it is stupid and suicidal for the labor union to strike on flimsy or political reasons, thus impeding work, reducing production, increasing operating expenses, and consequently having less profit and capital available for further investments. And it is to the best interests of Labor to co-operate for mutual advantage with Capital, and not to obstruct the mechanism of industrial progress, which will simply act to their detriment. For capital is shy in its investments, where it is not secure, the chance of profit less, and there is fear of disorder or trouble. And India badly needs to invite capital both domestic and foreign to invest in industrial enterprises with lucrative returns, for without the rapid industrialization of the country, there can be hardly any economic improvement and progress of the country.

II.

RELIGIOUS REFORMS.

Religion : Religion is the reflex mirror of racial intelligence and genius. It has conserved in more or less modified and sublimated forms, the primitive customs and philosophy of the ancestors of the race. Each tribe and race has tried to interpret natural phenomena to the best of its ability, and evolved thereby a cosmic philosophy which has been embodied in its religious rites and ceremonies, and as the tribal memory persists, hoary with age, they have been looked upon as sacred. A victorious tribe by superior might and organization has imposed its language and religion upon the conquered, and thus different tribes fused together have formed into a nation. So, some of the landmarks of the tribal customs of the conquered have been obliterated, while those of the conquerors also, have been partially modified by the intermingling of the blood, and by the social and cultural contact. This interaction of the tribal influence has complicated the study of ethnology. And though religious rites and ceremonies have been developed out of social needs, or to propitiate animating spirits, gods or God, as the people advances through knowledge and reasoning, the cosmic conception, passing through animism, polytheism, anthropomorphic monotheism, monism, pantheism, agnosticism and positivism, has exerted and still exerts a tremendous uplifting influence, restraining man from unworthy motives, cupidity, greed, in fee-

of god or salvation of the soul, thus creating social stability and advancing the progress of man. Yet what a crime has not been committed in the name of religion? It is because that the votary of each religion believes that his religion is the best, and it pleases his god to advance his religion, and other religions lead to perdition. This religious zeal is of supreme import, as the faith in it has been proven to be stronger than life itself. Rather this life is regarded in many religions as a preparation for the eternal life here after. The salvation of the soul is more important than the pleasures and comforts of the life here below which is transient, for the soul is immortal. India has been permeated from hoary antiquity with the idea of evanescence and transience of the earthly life. This extreme religiosity has been and remains to-day one of the primary causes of India's decadence.

Hinduism : Hinduism is a mixture of Brahmanism, Buddhism and the Dravidian faiths. It has therefore no fixed cardinal tenets, except to a certain extent the observances of caste and marriage regulations. The faith varies from the crude animism of the Santhals, polytheism of the average Hindu, pantheism and qualified monism of the *Vedantist*, to agnosticism of the *Sāṅkhayas*. The Hindu religious literature accordingly is the most extensive, universal and contains the most daring and abstruse metaphysical speculations of any religious literature. Though the belief in the immortality of the soul is universal, yet a Hindu can indulge in any thought, and boldly proclaim it even to the denial of soul as a separate entity from the somatic body, in the survival and

continuity of consciousness after death, in the supreme Soul (Parama-Ātman), nay even in the sanctity of the Vedas, on which the Hindu religion is supposed to be based. This has made the Hindu mind very liberal and receptive. And of religious people, the Hindu is the freest thinker. But though his mental horizon may be unlimited and free, yet an average Hindu in practice observes almost blindly the traditional worn-out rites, ceremonies, customs and manners, that have accumulated round the Hindu faith in the course of its tortuous evolution from the Natural Religion of the Vedas to the Polytheism of the present day. For *Hinduism is a cumulative, synthetic growth with wonderful vitality*, and it has incorporated and absorbed some completely and some incompletely, almost all the dynamic doctrines and faiths that have stirred Indian minds. If it is no longer a proselytizing religion, it is because it reached its saturation point with the Mahomedan conquest, and Mahomedanism, being an aggressive and militant religion, it had to cover itself within the hard shell of rigid and inflexible social rules and regulations, as an auto-protective measure. But within the organism, changes have been taking place as a reaction to the external stimuli, and to purify itself of the worn-out cumbersome waste-materials.

Reform Movements: *Jayadeva*, the author of *Gīta-Gobinda* at the end of the twelfth century, reacted to the Mahomedan influence, and taught the anthropomorphic conception of God, and that the practice of 'yoga,' austerities and sacrifices were nothing in comparison with the repetition of God's name. Two of his

hymns in the Prākṛita language of the time are incorporated in the 'Ādi Granth' of the Sikhs. *Rāmananda* in the beginning of the fourteenth century, during a visit to Benares, renounced the caste observances of the Hindus, and called his disciples the liberated; and freed them from all restrictions in eating and social intercourse. *Kabir* (born 1398 A.D.) denounced idolatry and ritualistic practices, and proclaimed the God of the Hindus and Mahomedans was one and the same. *Nānaka* (1469-1539 A. D.), the founder of Sikhism abrogated caste distinctions and idolatrous worship, and proclaimed the one God the Creator. Sikhism later became a militant Hindu Organization as a defensive measure against Mahomedan persecutions and aggressions. In its religious doctrine it is the synthesis of philosophic Hinduism and Mahomedanism, and to prevent the Hindus who had lost faith in ceremonial Hindu polytheism, from being converted to Mahomedans. *Brāhma Samaj* was a protest movement against ceremonial Hinduism and to prevent the educated anglicised Hindus who broke caste rules or went to England for studies, from becoming Christians, keeping them in the pale of Hinduism under the wing of the reformed church. It had the puritan characteristic from the beginning, being modelled more or less on the Unitarian Church of the West, with a blending of the Upanishadic philosophy of the Hindus and Sufism of the Mahomedans. Though in the beginning of the movement the Brāhma Samaj was more or less a denationalized body, looking at everything Hindu with contempt and prided in imitating the manners and customs of the West without discrimination and adapt-

ing them to the climatic and social needs of the country, being temporarily dazzled by the magnificent occidental success and progress, yet it rendered two distinct services to the community, (1) by keeping many distinguished youths of prominent families from becoming Christians, who became imbued with the European ideas of society, (2) and lastly, but more important, by giving advanced education to girls and opening schools and colleges for them, as well as forbidding child-marriage, and making marriage based on mutual selection. *Ārya Samāj* is a militant and aggressive Hinduism, basing its faith on the Vedas but with outstretched and reformative interpretation. *Rāmkrishṇa Mission* emphasizes the philosophic and meditative aspects of Hinduism, especially based on the Upanisadas and the Vedānta with social service.

All these reform movements of the 19th century have been more or less shaped against the disrupting and disintegrating influence of Christian Missions against the Hindu social organism. And due to the reactions and intellectual ferment thus provoked, Hinduism is no longer on the defensive, but rather has become aggressive. All these and other Reformed Institutions have been now practically re-absorbed into the Mother Faith, from which they sprang as rebellious daughters, and they do not need to remain longer as separate identities, when Hinduism has accepted, in theory and practice, all the cardinal principles of reforms, to strengthen her constitution and her armour of defence. Undoubtedly, Hinduism is yet far from being rejuvenated, and the corroding cumbersome and inutile debris that has accumulated within the body politic for

centuries, is keeping her invalidated and hampering her progress. But reforms must be brought about by her devoted sons, and not by insurgent parricides. The reforms have to be introduced slowly, suited to her constitution in conformity with her historic consciousness, so as to have lasting affect and in a way not to bring about unfavourable reactions. On the whole the old mother, though conservative, has shown surer instincts of self-preservation and organic health than her frivolous daughters who imitated the new-fangled fashions of the day. Brāhma Samāj is moribund, for she has been but Unitarian Christianity with anthropomorphic conception of God planted on Indian soil, but could not be acclimatized, being unsuited to the taste and temperament of the people, who are pantheistic by nature. Ārya Samāj is showing symptoms of precocious senescence, for she is trying to do the impossible in attempting to make the old and wrinkled Vedas appear as a modern young and seductive bride. Rāmakrisna Mission is predestined to die, for she is living on her capital and not on her accrued interest, preaching and practising continence and celibacy. Moreover the conception of God-intoxication, or God-absorption may be a seductive illusion, for soul as a separate existence from the somatic body or its survival after death is, according to modern thinkers, contrary to the biologic and psychologic principles. Hinduism therefore needs to be reformed from within, as she has all the elements for adaptability and progress. All that is necessary is to emphasize, to interpret, to popularize and to make fashionable by the elite of the community, the most salient rational points of Hinduism, and to

discard the rest that serve no useful purpose and are regarded as exercising a pernicious influence on our body politic. The masses always follow the dictates of fashion of the intellectual, wealthy aristocracy.

India is a religious country. The doctrine of the immortality and the transmigration of the soul is deeply rooted in the public mind. Religious faith can not be rudely shaken, but it can be oriented into fruitful channel, in the formation of character, communal hygiene and social service. Illiteracy, ignorance and credulity of the masses are certainly great stumbling blocks in the way of radical reforms, but an active press and platform campaign, and the training of the priests in the right direction are likely to be of great and lasting benefit. Hindu priests are usually very ignorant, not only of comparative religions but of their own religion as well. Their only qualification for priesthood is hereditary birth. In all civilized countries the candidates for priesthood undergo years of training in national literature, general science, history of religion and comparative religion before they are allowed to practise their profession which has such a vital relation to the social welfare as the name for the priest in Sanskrit—*Purahita*, clearly indicates. Neither in India should it be otherwise. There should be training schools for the priests, and if the public will decline to engage none but those who are certified to be fitted for a religious teacher, much would be done to raise the cultural level of the masses, and to uplift the noble profession, which lies so fallen and degraded to-day.

Polytheism, or idolatry is certainly not more

harmful than anthropomorphic monotheism which is a worse superstition. Human nature craves adoration and worship. It is hard to worship an abstract principle, but its interpretative symbolic image can appeal to the heart and rouse sentiments, that are ennobling and purifying. I have often with throbbing heart reverently watched the Burmese maiden in her colorful flowing silken garb, putting incense and flowers before Buddha's altar and praying for her baby, husband, sweet-heart, mother and brothers, or the Italian woman kneeling before the way-side shrine of Madonna, and praying for her loved ones. Nothing could be more beautiful and appealing than these. What prayer to God could rival such charming beauty or evoke such tender emotions? Gods and festivals have evolved out as organic social needs. Religious festivals bring joy to the children, adoration for women, social gathering, songs, recitations and feasts for all. It is much better that feasts and merriments should take place at the birth-days of our national mythical heroes, as that of Krisna and Rāma, or the seasonal festivals, as the Vāsanti Pujā in spring, or the Durgā Pujā in autumn. The ceremonies like 'Bhrātrī-ditiā' in which the union of the brother and sister takes place, and the sister prays for the long life and happiness of the brother and bestows on him affectionate considerations and gifts, or the 'srādhya' in which annually the names of the ancestors are reverently remembered and prayed for, or the 'Visvakarmā Pujā' (architect of the universe), on which day the laborers enjoy a merry-making holiday, assemble together, make rowing contest or exhibit athletic feats and physical prowess in the midst of songs, music and general merriment.

ments—these ceremonies and others should be made fashionable and reinvested with the halo of romance and sanctity which shrouded them in the days of yore. And remembering that Hinduism is based on the sub-stratum of the Dravidian faith, modified more or less by the Indo-aryan culture and influence, it can be easily comprehended that it needs further revision in the light of modern knowledge. The gods and goddesses should have serene and artistic appearance so as to inspire the aesthetic taste and the religious sense of the people. The elephant-headed 'Ganeṣa' the secretary of the gods, and who still claims the first worship from the votaries, is certainly the remnant of the primitive zoo-morphic religion. The Indo-Aryans called the elephant 'hasti,' for they thought that its flexible and sensitive trunk terminating in a finger-like prehensile lobe was a hand (hasta), and perhaps the Dravidians for that reason gave it divine attributes. 'Kālī' whether she represents 'kāla=time' with its constructive and destructive forces, or simply the primitive cannibalistic cave-woman in her terrible orgiastic dance, with remorseless and rude Śiva her lord who dwells in caves, has matted hair on its head, uses a serpent for his necklace and the skin of the leopard as his garment, and her another aspect Bhābanī, demanding and delighting in human sacrifice as a sacred and secret rite, can not certainly evoke reverential awe or bring holy calm to the mind, and should be displaced from the Hindu pantheon, or replaced by another goddess of more serene and reassuring type. Temples too need to be built, with particular attention to hygiene and social service. Some temples may be easily converted into

maternity clinic with appropriate religious discourse, and others into hospitals and schools, keeping a fervent religious atmosphere as far as possible. Pilgrimages should be encouraged, and as the principal sanctuaries are located in the midst of scenic charms and beauty, sanatoriums should be established there with medical attendance, libraries and religious discourse and interpretations. Hinduism can be modernized, if serious and earnest attempts are made. The rich and varied literature and mythology can be made a perennial source of instruction and interest, appealing to the heart and intellect alike.

Mahomedanism: Islam is a simple and democratic faith. It is a major daughter of Judaism, her other important sister being Christianity. Though its philosophy is crude, well-suited to primitive peoples, its democratic institution, social brotherhood and cohesion, in which all the Moslems are regarded equal, and the slave of to-day may be the prime minister of to-morrow, have made it one of the most dynamic and vital factors in world affairs. Its marvellously phenomenal rapid growth and expansion in the first century of its birth was due perhaps to the facts that the spoiliations of the conquest were distributed among the believers after the administrative expenses were met, and Moslem State was framed after the conception, that the Moslems should be kept as a superior fighting people enjoying all the privileges, and the non-Moslems should support them. Omar the second Caliph regulated the system of taxation on the following basis: (1) a tithe paid by every Moslem, known as 'zakāt'; (2) the fifth of all booty; (3) the

poll-tax (jizya) on non-Moslems ; (4) the land-tax (kharāj) also on non-Moslems. Such a system, as can be easily imagined, led naturally to wholesale conversion to Islam to escape economic burdens and other disqualifications of being an infidel in a Moslem-State. And every Moslem has reason to feel proud, for though the duration of Mahomedanism has been brief in comparison with other religions, it has a brilliant, colorful and eventful epoch-making history ; and ferociousness, fanaticism, sensuality, covetousness and vanity, typical characteristics of the Semitic race, have been also, partially imparted as a psychological trait of the religion to the new converts, which added in no small degree to its vigorous constitution. Their fanaticism and inconsistency have been marked from the beginning. After the assassination of the second Caliph Omar at Medina in November 644, when there was a contest over the Caliphate between Othman and Ali, whether the Caliphate with its emoluments should be the reserve privilege of the Koresh tribe alone, or should be elected by all the tribes, and Ali, championing the cause of democracy though he had no other motive than to serve his own personal ends, had to surrender, when the aged Caliph Othman was murdered in cold-blood, and his cause was championed by the distinguished Syrian governor Moawiya. The Moslems and their children who disagreed with the Kharijites were regarded as renegades and were put to death, and only the Ibadides allowed the children of the unbelievers to grow up. Though Islam is strictly against idolatry, yet the black-stone Kaba, representing the phallic god Hobal remains yet to-day the most

sacred sanctuary of Mecca, the venerable object of pilgrimage for all devout Moslems.

After the capture of Mecca, Mahomet in order to consolidate his position and influence, had to extend his domain to occupy the strategic positions. Central Arabia being a desert and inhabited by independent nomads, it necessarily brought him in conflict with the powerful Byzantine and Persian Empires, which dominated the north-western and south-western portions of the peninsula. In the year A. H, 7, Mahomet sent missives to all neighboring potentates and rulers, promising them safety if they embraced Islam. The king of Axum received the message favorably; an Egyptian governor sent the prophet two Coptic women as a present; the emperor Heraclius is claimed to have been a secret convert; the Persian king ordered Mahomet to be arrested, but it could not be carried out, for when the officers arrived in Medina, they heard that the king had died in the meantime; Himyarite chiefs of Yemen became converts to the new faith; the governor of Bostra put to death the bearer of the insolent message, and to avenge this outrage, the prophet in A. H. 8, led an expedition and met the Byzantine forces at Muthah, and though the battle was not conclusive, in the next year, the Byzantine forces withdrew much of the territory which came under the influence of Mahomet. After the death of the Prophet, his friend and father-in-law Abu Bekr under the guidance and protection of Omar became his successor. Confronted with internal dissention and revolt, Abu Bekr was compelled, in the beginning of his Caliphate, to leave the Greeks alone and with the

withdrawn army to consolidate his position at Medina. But the foreign conquests proved too profitable to the Arabs to be given up so easily, and the promise of a good booty for all, united the Arabs for a common purpose. Damascus fell by the onslaught of the Moslems in 635 A. D., and in August 636 was fought the great decisive battle, which made the emperor Heraclius abandon Syria. Soon Palestine, Syria, Mesopotamia, Assyria, Babylonia and Egypt (640) were overrun by the Moslem hordes. After the sanguinary battle of Nehawend in 641, the Sassanid empire of the Parsis also came under Moslem control, though stubborn resistance was offered. Omar, who succeeded Abu Bekr in 634, during his 10 years' reign consolidated these vast conquests by his just and fair administration. Within a century of the death of the Prophet, the Moslem Empire was larger than that of Alexander, and almost as large as that of Cæsar. Within two centuries the Moslem flotilla chased the Norman pirate vessels up to the mouth of the Loire. Within eight centuries the Moslems thundered before the gate of Vienna. In the meantime Christian potentates solicited the favor and alliance with Moslem rulers. The Moslems conquered part of Italy, and burnt even the suburbs of Rome. Pope John VIII paid them an annual tribute of 25000 Marks of silver. Venice and Genoa did just the same. Philip II of Spain solicited and made a humiliating Treaty with Sakolli the Great. Spain came and submitted to Moslem rule for 782 years. France concluded a treaty of alliance. Nimes and Beaume were taken by the Moslems ; they advanced up to Franche-Comte ; Autun was pillaged ;

Sens purchased its security by paying a heavy tribute ; Avignon, Arles and the major part of Provence came under Moslem submission ; Bordeaux received an assault before the battle of Poitiers, which lasted seven days, and decided the destiny of Western Europe ; Abderrahaman was killed, and victory came to the Christians. Elizabeth, queen of England, was engaged in correspondence with Amrut, soliciting his friendship. The Swiss kept an agent at Constantinople. Austria paid tribute. The king of Poland received his investiture from the Sultan of Constantinople. The Russian Czar, instead of dreaming of the Golden Horn, wrote to Salim I, reminding him of their common Tartar origin : "Our fathers have been brothers, and why should we not live like brothers ?" The Caliph of Islam exercised powerful influence over the Pope of Rome, and a criminal like Bociardo was made cardinal at the recommendation of Bajazet. From the northern African littoral through the mediterranean (Sicily) up to the Chinese Sea, the land and the water was under the Moslem control. One remembers the famous saying of Akbah-ben-Nasi when he arrived at the African Atlantic in Morocco, and pushing his horse to the surf he cried : "O God of Mahomet ! If I were not arrested by the ocean and the waves, I would have gone to the end of the universe to carry the banner of thy glory."

With the expansion of arms, science also was developed, especially when the Moslem power came under the cultivated and refined Persian influence as at Bagdad. Haroun-al-Rasid who had Persian blood in his veins established science in Bagdad. His son Almamoun who regarded knowledge as the salvation

of the people, searched libraries from Alexandria to Athens for the Greek books and had them translated into Arabic. He established free libraries and colleges for six thousand students of medicine and astronomy and his astronomical observatory is still an object of wonder. And neither in original researches the contributions of the Moslems are insignificant. *Astronomy*. The movement of the solar apogee, eccentricity of the orbit of the sun, the exact determination of the year, the progressive oblique diminution of the ecliptic, the discovery of the irregularities in the lunar greatest latitude, the determination of the third lunar inequality, the invention of the stellar chart, the gnomon, pendulum, etc. *Geography*: The revision of Almagest Ptolemy, the measure of the degree at the meridian, and the making of land and nautical maps. *Mathematics*: The introduction of the tangent in trigonometrical calculations, substitution of the table of sine for the table of chords of Ptolemy, application of algebra in geometry, solution of the cubic equations, etc. *Chemistry*: The manufacture of sulphuric, nitric nitrohydrochloric acids, preparation of mercury and oxides of metals, alcoholic fermentation and brandy, etc. *Botany*: The classification of 200 plants, creation of botanical gardens, and the discovery of the sexual fertilization of plants, etc. *Zoology*: Zoological gardens were established, and Aldemiry wrote an excellent history of animals, like that of Buffon. *Medicine*: The regulation of Pharmacopeia, establishment of medical schools with hospital for clinical studies, amphitheatres for anatomy and surgery, the introduction of senna leaves as a purgative, and sugar

in place of honey, etc. *Agriculture*: Cultivation and improvement of plants by the selection of the seeds and the introduction of the water-wheel in irrigation.

Islam being a democratic brotherhood, having no proletariat or aristocracy, (except the 'Sydes'—the lineal descendants of the Prophet,) naturally this glorious past is the heritage of all Moslems, and every follower of the Faithful takes pride in these achievements and in their reflected glory. And though in the middle age, the Toledo University was the only beacon light, and contributed a good deal to bring renaissance in Europe, Islam has been since then reactionary and regressive. There are two things that are keeping the Moslems bound and chained: (1) Faith in the Koran as the depository of all knowledge and wisdom, and supreme authority in all things, being the revelation of God; (2) Polygamy and seclusion of woman. Europe began to make progress only after Luther liberated her from the thralldom of Papacy, which was keeping her in ignorance, superstition and inefficiency, by his successful Protestant Reformations. Islam, likewise, should shake off the chains of religious fanaticism, which is only suited to primitive life and unfits man for modern existence, which chains are suffocating her to intellectual death. Polygamy is positively detrimental to intellectual progress. It may be that a very few Moslems can indulge in this luxury as it is very expensive, and the number that practises it certainly does not exceed that of the West, and the wives are fewer in number than some of the 'Kulina Brahmins' of Bengal marry. But between them there is this vital difference that though adultery is common in the

Western countries, it is not so harmful ; love and marriage, being based upon mutual selection and reciprocity of taste and feelings, it naturally develops qualities that are most desired, which are, usually intellectual abilities, and the home life remains pure, free from coarse licentiousness and intrigues which are concomitant with polygamy, and the children are reared by intelligent mothers, and with proper regimen ; and the Hindu marriage is sacramental, even among the 'Kulin Brahmins' who practise polygamy, and who are usually backward and miserable, and the wife is a spiritual companion, and not a mere object of sensuality, and who can be discarded at whims, or as soon as her color fades, or if one with a more seductive mien catches the fancy as among the Moslems. It is possible that polygamy among the Moslems is more talked about than practised, but as an institution sanctioned by Law, it clogs the machinery of progress and intellectual development. It certainly can be abrogated, as marriage being regarded as a civil contract, it can not have any integral bearing on religion.

Indian Moslems being usually circumcized Hindus with Arabic names, are most advanced in the vanguard of progress. They are not only ethnically Hindus, having but a slight trace of Arabic blood in Sind and among the Mophlas on the Malabar coast, but also they have not even given up their Hindu customs and manners. They have simply adopted the religion of the conqueror as a policy, and have changed their own Sanskrit names and of the gods for the Arabic ones. Otherwise, they have remained in the integral part of the Hindu economic system. There is no divergence

in place of honey, etc. *Agriculture*: Cultivation and improvement of plants by the selection of the seeds and the introduction of the water-wheel in irrigation.

Islam being a democratic brotherhood, having no proletariat or aristocracy, (except the 'Sydes'—the lineal descendants of the Prophet,) naturally this glorious past is the heritage of all Moslems, and every follower of the Faithful takes pride in these achievements and in their reflected glory. And though in the middle age, the Toledo University was the only beacon light, and contributed a good deal to bring renaissance in Europe, Islam has been since then reactionary and regressive. There are two things that are keeping the Moslems bound and chained: (1) Faith in the Koran as the depository of all knowledge and wisdom, and supreme authority in all things, being the revelation of God; (2) Polygamy and seclusion of woman. Europe began to make progress only after Luther liberated her from the thralldom of Papacy, which was keeping her in ignorance, superstition and inefficiency, by his successful Protestant Reformations. Islam, likewise, should shake off the chains of religious fanaticism, which is only suited to primitive life and unfits man for modern existence, which chains are suffocating her to intellectual death. Polygamy is positively detrimental to intellectual progress. It may be that a very few Moslems can indulge in this luxury as it is very expensive, and the number that practises it certainly does not exceed that of the West, and the wives are fewer in number than some of the 'Kulina Brahmins' of Bengal marry. But between them there is this vital difference that though adultery is common in the

Western countries, it is not so harmful; love and marriage, being based upon mutual selection and reciprocity of taste and feelings, it naturally develops qualities that are most desired, which are, usually intellectual abilities, and the home life remains pure, free from coarse licentiousness and intrigues which are concomitant with polygamy, and the children are reared by intelligent mothers, and with proper regimen; and the Hindu marriage is sacramental, even among the 'Kulin Brahmins' who practise polygamy, and who are usually backward and miserable, and the wife is a spiritual companion, and not a mere object of sensuality, and who can be discarded at whims, or as soon as her color fades, or if one with a more seductive mien catches the fancy as among the Moslems. It is possible that polygamy among the Moslems is more talked about than practised, but as an institution sanctioned by Law, it clogs the machinery of progress and intellectual development. It certainly can be abrogated, as marriage being regarded as a civil contract, it can not have any integral bearing on religion.

Indian Moslems being usually circumcized Hindus with Arabic names, are most advanced in the vanguard of progress. They are not only ethnically Hindus, having but a slight trace of Arabic blood in Sind and among the Mophlas on the Malabar coast, but also they have not even given up their Hindu customs and manners. They have simply adopted the religion of the conqueror as a policy, and have changed their own Sanskrit names and of the gods for the Arabic ones. Otherwise, they have remained in the integral part of the Hindu economic system. There is no divergence

and cleavage of interests between the Hindus and the Moslems, rather they are identical. Only a few Moslems are suspected of being fanatical and sensual, having longing eyes after young Hindu widows. But this, education will remedy. And it is possible that the Moslems are unjustly accused of seducing Hindu widows, for it is the fault of the Hindus who allow such a suicidal tyrannical system to prevail, where adolescent widows, often married before their pubescence, are forbidden to remarry, and are compelled to live the miserable and pitiable lives of nuns, and do all the drudgery work of the family. The cow being an object of reverence with the Hindus, and a religious sacrifice of the Moslems, has often become the cause of ill-feeling between Moslems and Hindus. But the sacrifice of the cow is not an integral part of the religious ceremony of Islam, and it is contested by many authoritative Moslem theologicians, whether it has been even sanctioned; and another animal could just as well be substituted for the bovine creature. The Moslems should realize that it is not a good policy to hurt unnecessarily the religious susceptibilities of their neighborly brothers, and if the cow-sacrifice is needed, it is æsthetically, morally and hygienically unjustifiable to make a big show and demonstration of it, or to torture the animal, as the excitement provokes the production of an excessive quantity of the toxic alkaloid leucomaine. The Hindus also must understand that beef is an article of food which the Vedic Risis used to take with relish; and there can be no possible objection especially against the Mahomedans when it is the daily food of millions.

of people all over the world. Its consumption may increase the food-supply of starving millions enormously, and the demand may, under proper guidance and control, necessarily cause a large increase of cattle and in the quality of the breed, thus also adding greatly to our milk-supply which is short.

Christianity : Christianity is the most progressive daughter of Judaism, and she has shown the most wonderful adaptability to the changed conditions of time, due to the acquirement of knowledge, of all religions. The Christianity of the twentieth century is quite different from what it was in the first ten centuries, or in the medieval ages. While other religions have retrograded, or have remained stationary, Christianity alone has advanced with the progress of time. Religion is the barometer of racial genius, and this explains why the intellectual advancement of the European nations in the last three centuries who profess Christianity, has reacted on the religion favorably. European nations have advanced in spite of Christianity, and their advancement has improved their religion. While the Oriental nations have not advanced much industrially and culturally for the last five centuries, and their religions have remained in the same backward conditions. But this does not mean that Christianity is suited to other peoples. On the contrary its adoption is likely to cause them positive harm. Modern nations have outgrown their religion, and Christianity has almost ceased to exert any tangible influence over the people, and its functions have been adapted to the social service as an accomodation to the changed outlook of life, and there

are very few who pay to it any respect except some old men or women out of tradition, and the priest has been an object of pity, ridicule and contempt, and hardly one can be found to pay him reverence except some devote old women, or remote, ignorant rurals. The reason is, the pivotal tenets of Christianity are primitive. The Protestant Church trying to liberate it from the crude Catholic rites, has paralyzed its emotional centre, and at the same time has not made it reasonable enough to appeal to the intellect. So the Protestant Church is dying out, for it can not appeal either to reason, or to emotion which is the fountain of all faiths. The crude Biblical cosmogony of the creation of the earth in six days and in 4004 B. C., the primitive anthropomorphic conception of God, the Jewish superstitions and repulsive obscenities in which the Bible abounds, Christ as the Son of God and the only Savior of mankind by virtue of shedding his own blood to redeem the sins of man, certainly can not appeal to any person of reason or education. Never-the-less the Christian Missions are serving useful purposes in the Orient. As a seductive bait of conversion to their religion, they are opening schools and hospitals, which have done and are doing immense good to the people. By their attacks also, on the vulnerable points of Oriental religions, they are awakening these peoples from the slumber of centuries, and are reflexibly stimulating religious and social reforms, and intellectual interest and researches not only in their own religion, but in other religions as well, as self-defensive measures. The study of Comparative Religion really owes to the Foreign Christian Missions.

But Christian conversion acts as a disintegrating and corrosive solvent on the social organism. The convert, though by the conversion might improve his economic position and receive better educational facilities and hygiene, finds in the end, that he has changed his old familiar gods for the strange and new ones which are no less superstitious, if not worse, and if he has renounced caste, he has been simply outcasted, for the Christian class distinction, if less demarcable and more elastic than the Hindu caste, is none-the-less exclusive and tyrannical, for being vague it is hard to contend with. But worse still he becomes socially and psychically alienated, thereby, almost becoming a stranger in his own country. The accusation that Missionaries often act as spies and to create spheres of influence in the guise of benevolent actions, may not be substantiated. Many of the Missionaries are honest and sincere bigoted religious propagandists, and they might simply unconsciously serve the imperial interests which supply them with funds for their activities. But it is noteworthy that the atheistic French Government encourages a Catholic Mission in Syria, and the British Government interned the German Missionaries in India during the war; and during the Boxer War (1900), the converted Christians joined the foreign powers, and fought against their own countrymen who were attempting to liberate the country from foreign oppression and economic exploitation; and though one constantly hears of the fierce denunciation by missionaries of Turkish oppression against Christian minorities, Japanese tyranny in Corea, one hardly hears these humanitarians protest against the oppressive and exploi-

are very few who pay to it any respect except men or women out of tradition, and the priest an object of pity, ridicule and contempt, and one can be found to pay him reverence except devote old women, or remote, ignorant rural reason is, the pivotal tenets of Christianity are. The Protestant Church trying to liberate it from crude Catholic rites, has paralyzed its emotions and at the same time has not made it strong enough to appeal to the intellect. So the Church is dying out, for it can not appeal to reason, or to emotion which is the fountain of life. The crude Biblical cosmogony of the creation of earth in six days and in 4004 B. C., the anthropomorphic conception of God, the Jewish institutions and repulsive obscenities in which it abounds, Christ as the Son of God and the savior of mankind by virtue of shedding his own blood, deem the sins of man, certainly can not attract any person of reason or education. Nevertheless Christian Missions are serving useful purposes in the Orient. As a seductive bait of conversion to a new religion, they are opening schools and hospitals, have done and are doing immense good to the world. By their attacks also, on the vulnerable Oriental religions, they are awakening the world from the slumber of centuries, and are stimulating religious and social reforms, and interesting and researches not only in their own but in other religions as well, as self-measures. The study of Comparative Religion

But Christian conversion acts as a disintegrating and corrosive solvent on the social organism. The convert, though by the conversion might improve his economic position and receive better educational facilities and hygiene, finds in the end, that he has changed his old familiar gods for the strange and new ones which are no less superstitious, if not worse, and if he has renounced caste, he has been simply outcasted, for the Christian class distinction, if less demarcable and more elastic than the Hindu caste, is none-the-less exclusive and tyrannical, for being vague it is hard to contend with. But worse still he becomes socially and psychically alienated, thereby, almost becoming a stranger in his own country. The accusation that Missionaries often act as spies and to create spheres of influence in the guise of benevolent actions, may not be substantiated. Many of the Missionaries are honest and sincere bigoted religious propagandists, and they might simply unconsciously serve the imperial interests which supply them with funds for their activities. But it is noteworthy that the atheistic French Government encourages a Catholic Mission in Syria, and the British Government interned the German Missionaries in India during the war; and during the Boxer War (1900), the converted Christians joined the foreign powers, and fought against their own countrymen who were attempting to liberate the country from foreign oppression and economic exploitation; and though one constantly hears of the fierce denunciation by missionaries of Turkish oppression against Christian minorities, Japanese tyranny in Corea, one hardly hears these humanitarians protest against the oppressive and exploi-

tive measures of the powers in the so-called backward countries, especially in India, China, Java and Africa where they are so apparent.

Buddhism : Buddhism was the protestant reform movement against the Brahmanic Faith, religious rites, observances and ceremonies. It is one of the oldest, most rational and popular of all religions. In its cardinal tenets, it is agnostic ; it is simply a religion of brotherhood and humanity, and is suited to every kind of society. Man needs a religion. It strengthens and consoles him. Religion is society's integrating cement against its disruption. Religious injunction, fear of the salvation of the soul, yet keep majority of the people from the commitment of anti-social acts, and as long as their conscience is not fully developed so as to have all their activities guided only by a sense of right and wrong, the religious inhibitive function is necessary. Buddhism has a positive philosophy which can not come in conflict with any new scientific discovery, has an extensive inspiring humanitarian literature, and at the same time possesses deep and intense moral and devotional fervor. It has not the denationalizing caste prejudices and primitive, meaningless religious rites of the Hindus, yet it is a Hindu Faith which reigned in India for more than a millennium, promoting science, culture and civilization, surpassing anything in the past and even unsurpassed to-day, and Buddha still remains to-day a Hindu god—the incarnation of God, an object of adoration and worship. It is a democratic religion of social fraternity and cooperation like Islam yet its fair name has never been tainted with blood sword or fanaticism. It is a religion of mercy, kindness

humanity, humility, social service and overflowing love for all living creatures in thought and action like the doctrines of Christianity which are in no small way indebted to it, but its votaries are politically and militarily powerless, and Buddhism can never be suspected of being an agent of aggression like that of Christianity. Buddhism alone therefore can unite India religiously and culturally, and set her on the path of progress. Only it is necessary to propagate this noble faith, and publish broadcast its literature in Pali as well as the translations in the vernacular. It may be said that the Buddhists at present are backward culturally and industrially, and are superstitious. But they are backward and superstitious, not because of their religion, but because of their ignorance, and though Buddha never said anything about God, they have made him a god and have given him all the divine attributes. The only serious objection may be the ordination of the renunciation of wordly affairs, and the practice of continence for the Buddhist monks, which if they are not very old, lead naturally to abuse and social corruption and the loss of population from the best elements which are needed for social uplift progress, being against the healthy, wholesome and natural instincts of man. But Buddha himself was married and had a son—Rahula. And in this case the Hindu *Vanaprastha* system may be followed with advantage, which is only permitted after one has fulfilled the first three preliminary obligations as sound education and disciplinary character—*Brahmacharyya*, marriage, proficiency and s *s i m l e*, a *i* of adolescence of childr

garhastha. Then one can leave his home and children, and devote the rest of his life to teaching, meditation and contemplation, thus giving the benefit of his experience to the world, and at the same time giving the children freedom to translate the new thoughts into action, unhampered by the old fossilized ideas of the elder generation.

III.

SOCIAL REFORMS.

Caste : Caste is keeping the nation disunited, forming into numerous, separate, self-sufficient, narrow compartments, thus impeding free circulation, current and intercourse of national thoughts, culture and vitalizing social contact. Whatever might have been the origin of caste, whether as a segregation of ethnic groups out of social necessity to remove friction, giving each one a status with privileged rights and obligations thus producing social harmony, co-operation and efficiency out of disharmonious elements, or as a division of labor forming into trade-guilds, thus producing the best results and utmost productions by hereditary transmission of acquired characteristics, environmental influences and training, or a combination of both which, is the most likely ; and whatever useful function it might have served in the past in our social economy, it is uncontestably true to-day, that it is standing against our united common purpose and action. And no longer is there any necessity for it. Blood has mingled inspite of inter-marriage restrictions. And the machine of hereditary trades and occupations has been dislocated by foreign conquests and the introduction of new methods of production and distribution of commodities either for domestic consumption, or for external commerce. Ethnologically and culturally a Brahmin can be hardly distinguished to-day in any part of India, from any non-Brahmin upper class.

Especially in Bengal, the Baidyas and the Kayesthas are beating the Brahmins in the intellectual game, and in physical appearance it is impossible to distinguish one caste from the other. In the United Provinces, also, the Banias lead the community in education, industry and influence, and a Brahmin can hardly be distinguished from a Bania in cranium measurement, nasal angle or complexion. The fact is, though all the divergent ethnic elements have not yet been completely fused into one stock, the upper three classes have practically the same blood, and the gradation follows imperceptibly merging one into the other into the lower strata. And not only no race is pure, and neither the Indo-Aryans can claim any intellectual superiority over the Dravidians or the Mongolians. All these divergent ethnic groups with the Kolarians at the bottom, have been mixed together without complete ion into infinite imperceptibly varied gradations.

Bengal not only many Sudras, but quite a few Chandalas can be found who have not only a fairer complexion and refined mien, and neither are they intellectually inferior to many of the Brahmins. Hence it is useless to keep an artificial barrier which serves no useful purpose, for if it was meant to prevent the intermixture of blood, it has already taken place, and if to regulate professions and occupations by trade-guilds, they have been already upset, for it is very common for a Brahmin in U. P. and Western Bengal to till the soil or to act as an attendant (*dāroān*), while many Sudras are teaching in schools and colleges with great ability. Moreover the restrictions of inter-caste relation have gone to an absurd and ridiculous limit.

The food of a Brahmin becomes polluted by the touch of a non-Brahmin, or if the shadow of a Pariah falls upon it. Hinduism boasts of universal sympathy, finer sensibilities and feelings than other peoples. They claim, they do not partake of animal food and will not cause lower defenceless creatures pain, sufferings and death for their only existence, but the Hindus treat their co-religionists, their own countrymen and fellow-brethren with remorseless inconsideration, inhumanity and cruelty, which though may not be apparent due to customs and habits, are none-the-less poignant and unworthy of a civilized community and religion.

Marriage : Marriage is the basis of society and state ; nay more than that—it is the fountain-spring of religions, optimism and eternal life. Love merges personal egoism and selfishness into mutual cooperation and joy—substratum of humanity and altruism. Marriage is sacramental and indissoluble to the Hindus, and rightly so. For a union of such paramount importance to the happiness and well-being of the individuals concerned, family, society and the race, can not be left to ephemeral whims, caprices, passions and sentiments. Unquestionably marriage must be based on mutual selection, thus developing the qualities that are most desired, but eugenic and social fitness is to be taken into serious consideration also for the improvement of the race, as the product of the marriage will belong to the community, and the community has a right to regulate as to who will be its members. But in India the elders arrange the marriage of their children as a family-alliance with but little consideration of the desires and feelings of the parties concerned.

And this fundamentally violates the sanctity of marriage, for marriage without reciprocity of feelings, mutual admiration, common ideas and ideals in life, based simply on opportunism, is an empty mockery. It is true that romantic love is often fleeting and deceptive, and the marriage arranged by guardians of the couple coming from the same status of life having almost identical tastes, temperament and outlook of life, under the joint-family system, which imposes little burden on the newly-married couple, but trains them slowly for responsibility, with sympathetic understanding of the problems, does not necessarily need to be unhappy, rather the conjugal attachment and love proves very dynamic, knowing their destiny is interwoven in an inseparable link, and with the birth of children the bond becomes more closely cemented parental love, thoughts and feelings being oriented to the rearing and the welfare of the offspring.

In the west marriage takes place by mutual selection, but often in passing fancy, mistaking it for a permanent love. If the parties come from the same class, and their tastes and habits harmonize, they adapt themselves to each other very well, otherwise, disillusionment comes sooner or later. Youths are apt to use little judgment in the selection of their mates and carried away by their fancies and imperious biotropic attraction and intoxication, they think very little of hereditary, eugenic and social fitness, which alone ought to be the basis of marriage. And moreover girls find it hard and not unoften perilous to find suitable mates. In India this responsibility is taken by the parents, in a way acting perniciously on

society by robbing youths of their initiative, the pleasures and intoxication of romantic love, and the joyous thrills of conquest on their own individual merits. The parents should and ought to investigate the character, fitness and heredity of the suitors of a girl, before she may be permitted to be familiar with them, and acquaint her in a judicious and solicitous manner, as to the result of their investigation; but they should not trespass any further on her privileged right to select her own mate, and not force on her an undesired companion for life.

Girls can not be trusted to use good judgment and discretion upon a question, which has such a vital bearing on her happiness before she is 21 to 23, nor is she physically and mentally fitted for wifely and motherhood before that age. And as civilization advances, more than physical fitness, mental fitness rather becomes the criterion of motherhood for the fulfilment of the complicated task which modern life demands, or the race suffers. Mother is the highest teacher, and home is the best school, and her influence is predominant in forming the character and educative materials of the child. With premature motherhood there is race lethargy and retrogression, precocious senility and excessive child-mortality, thus arresting progress at the biotic fountain-head, and leading to racial, physical and mental degeneracy.

It is certainly a popular misconception that with pubescence sexual life should begin when the senses are newly awakened, or it might lead to sexual immorality and debasement. Organic development is not complete until after a few years of puberty; mental

requires a few years longer and economic fitness a few years more; then alone, one should undertake the duties and responsibilities of marriage and parenthood. In the meantime, self-control is needed to utilize the sexual energy for the completion of organic development, physical and mental health and vitality, and the formation of character and will-power by self-discipline. In the West due to the severe struggle for existence, marriage generally takes place for men in upper thirties and for women in upper twenties, especially among the middle-class, yet by close study, immorality does not seem to be more prevalent there, than in the East, where early marriage is customary. Venereal disease, which is a pretty good barometer of immorality, seems to be also more prevalent and ravaging in the East than in the West. Born blindness, defective vision, sterility, still-birth and syphilitic sores and mata, one meets in Constantinople, Cairo, Alexandria, Bombay, Srinagar, Delhi, Agra, Bankipur, Calcutta, Singapur, Shanghai, Peking and Tokio, and they are really sickening. It may be said that in the West better hygienic cares are taken, and venereal disease like any other disease is treated early in its inception, and consequently, its ugly and pronounced symptoms are not so manifest, having up-to-date medical service and aid, at the disposal of the people, than there is in the East, where such medical treatment is beyond the reach of most of the people; and the standard of morality of man is low everywhere, but the chastity of the oriental woman is much superior to that of the occident. This is a popular auto-hypnotism and illusion if not a myth. If the oriental women are reputed to be more chaste

and faithful to their husbands than their occidental sisters, it is because they are practically kept in hermetically sealed boxes of the 'zenana' like living dolls, as the exclusive possession of their lords, leading sedate, vegetative lives, and where contaminating temptation can not take place. If she had the free, social contact with man, and could easily translate her sentiments into action, and be subjected to the same temptation as her Western sister, then it is questionable how the scales would turn in the balance. The forced chastity of the oriental woman lacks the dynamic value of self-disciplinary character-formation, for the improvement of the race. Chastity of woman is ordained and esteemed perhaps for these reasons : (1) Fear that she may be infected with a venereal disease in her intercourse with another man, and transmit the infection to her husband ; (2) Jealousy and the spirit of possession. Man wants to possess her exclusively for his own personal pleasure and gratifications, and if any one possessed her before, or shares the possession now, he feels his right of ownership damaged ; (3) Doubt in the heredity and parentage of the offspring, may make the father not take proper care of the children, as no one will work and sacrifice for other people's children as much as for his own. Otherwise the mucous contact in the extraconjugal sexual congress, can not be held so reprehensible, or more than kissing, where the mucous contact takes place just the same either between two women, man and woman, and a baby, and the pleasure-sensation is less intense and voluptuous, only because the nerve ramifications fewer in the lips than in the reproductiv

the erotic and libidinous centres are not directly associated and stimulated by the action. It is true that chastity is a complex sentiment, and can not be expressed in the above-mentioned formulas, and it is so, because the tradition and religion have hallowed it with an indefinable and inexpressible sanctity, and woven round it a magic golden charm. And with the boasted chastity, if the oriental women are physically weak, many of them infected with venereal disease by their husbands, have high child-mortality, age at thirty, and have a narrow and limited mental horizon, while the modern occidental woman enjoys a vigorous health, is alert and resourceful, has wide range of intellectual interests and pleasures, is a real companion, comrade, mate and co-partner of her husband and in all his activities, has a long reproductive period from 20 to 45, brings forth numerous offspring with strong vitality and health, very few of them die in infancy, knows how to take good care of them and give education under personal direction, and infuse them with an ideal, motive, an indomitable and all-conquering physical and intellectual vitality, it needs little prophesy to say which system will prevail, and which race will expand and dominate over the world. Oriental woman is great, for she has not yet become ego-centric, and has not yet made her personal pleasure the aim and object of life, but is capable of suffering and sacrificing herself for her beloved ones, and taking joy in the sacrifice, and her woman's heart is more dynamic than her intellect, than lies the vegetative quality of the orient. But let us not forget the

The conservative instinct of woman will tell her not to abuse her freedom. For an intelligent man, though he may toy with a seductive, charming, bright but fast woman, would not like to marry her, and to make her the mother of his children. Marriage is sacred. Monogamous marriage has evolved out of primitive promiscuousness, more as a protection of woman, the mother of the race, as an improvement over the other systems, conducive to progress, than for the benefit of man who has rather suffered disadvantageously by its restrictions. Woman has sense enough to appreciate it, and she will not defile the sanctum, by any profane action, which will penalize her. Free love may be all right for a Don Juan type of man who yet retains the polygamous instinct, but it is certainly degrading to woman. Woman can not be both wage-earner and mother. During her pregnancy, confinement, or when her beauty fades, or when she becomes sick, many a man would prefer, if he had the choice, young adolescent maiden, discarding the love, as an outworn garment, without further ceremony. So with education woman will realize more and more that marriage is not only guarantee of her rights and protection, but also a safeguard of civilization, and she will with her advancement, demand the same standard of morality for man as is now demanded of her, than discrediting the institution which is to her advantage, and therefore it can be logically presumed that if the marriage and the age of consent be postponed from pubescence to adolescence, morality instead of being debased, will improve.

The dowry system, still prevalent in India,

justifiable from every point of view. It degrades marriage into primitive barter of goods, based on opportunism, and not on love, hereditary and eugenic values. It is a cancer in the inflorescence of love, and in harmonious and happy union. It is maintained on the ground that a youth spends a good deal of money and energy for his education, and when he marries a girl, she shares its advantages with him, and she ought therefore contribute something to the common fund. It is immoral in principle, and exerts a disastrous influence economically and culturally, upon the population. Dowry in France is undoubtedly one of the primary causes of her depopulation and decadence. A man should select his wife, not for the money she possesses, but for intrinsic qualities as a companion, comrade, mate, as wife and mother of his children. When money becomes the criterion of her worth, there naturally debases the ideals and ethical value and standard of a nation. In India, the number of girls does not exceed that of the boys. Therefore it naturally follows that if the parents of the girls and the girls themselves are determined not to offer any money in marriage settlement, then marriage will take place on the basis of natural selection, as the mating instinct is stronger in man than in woman. Of course it becomes necessary for woman to be engaged in gainful occupation so that she is economically free and is not compelled to choose her companion on any other consideration than that she loves and respects him, and would be proud to make him the father of her children. The procedure at teaching especially the Kindergarten classes, fine arts, sculpture, etc.,

works, secretarial and library business are well-suited to woman.

But once the mutual choice is made after a man has attained 23 and a woman 22 years of age, before which they are neither physically nor mentally fitted, and therefore, cannot be trusted with the responsibility and duties of parenthood, the marriage should be performed with religious awe and reverence, and not simply as a banal civil contract. For marriage is more than a civil contract. Though before marriage the parties concerned are free to feel and express their sentiments on whomsoever they please, but with marriage they enter into a tacit obligation with the society to bring forth children to their best ability, to be worthy members of the community. A child can not be well taken care of, and receive good education, if both the parents do not co-operate and act harmoniously with devotion for its welfare. Therefore, society has the right to demand for integrity and progress, that if the husband and wife, who were not compelled by the society to marry in a hurry, and had plenty of time to know and judge each other, and have after deliberation, chosen each other, and entered into a social contract to perform the most sacred and holiest function of perpetuating the race, if later they find that they have incompatibility of temperament, they must learn to adjust themselves to each other, as life has wonderful adaptability, for the welfare of the children, who need the love of both parents and their harmonious cooperation. Marriage therefore must be regarded as indissoluble and inviolate, until the death of either of the partner. .

Widow-re-marriage : As the

everywhere allowed to remarry, there is no valid reason, why an adolescent widow should not enjoy the same right. It is often defended on the following grounds: (1) In animal breeding it has been observed, that if for the first time a pure-bred female is allowed to cross with a mongrel, the animal retains some of the characteristics of the first mate, and occasionally transmits them to the later broods though afterwards she mates with her own type only. It has also been observed in a few human cases; a white woman marries a negro, and a mulatto child is born; the husband and the baby die, and she marries a white man, and with him she gives birth again to a mulatto baby. This may be explained on the theory that the ejaculated sperm of the man is partly absorbed in the vaginal mucous membrane, and circulating in the blood, changes the germ-plasm of the ovum, or more probably in the intra-uterine life, the circulatory interchange, that takes place between the embryo and the mother, the mother's germ-plasm becomes altered, from the embryo, which has received the idioplasms from both the parents. But as very few people marry for the sake of heredity, and if there is no reason to believe that the characteristics of her first husband are worse than his, and heredity being a complex indeterminable equation, and its transmission being hardly proportionally direct, and every one of us being mixed and having complex-compound heredity, this can not be a sufficient reason to debar widow-remarriage, and especially it has no relevancy to virgin-widows. (2) If widows are allowed to remarry, it will compel many girls to remain unmarried, and as the widows had been given

the chance of the blessings of wife-hood and mother-hood, and destiny has decreed against them, it is the turn of unmarried girls to have them. But as the Census Report (1921) shows that the number of women, in India, is not larger than that of men, on the contrary, positively less ; under these circumstances, if widows are allowed to remarry, it can not take away the chances of marriage for unmarried girls. And moreover, if unmarried girls can not capture the heart of men by wit, beauty and charms, in competition with the widows, it is better that they do not perpetuate themselves, and not be protected by any artificial barrier which violates the law of selection, and lowers the physical and intellectual standard of the race. (3) If a widow is allowed to remarry, she might poison her husband whom she finds it disagreeable to live with, to marry another man of her choice, or, her lover, and she might neglect the children of her former husband. Woman, by nature, is deeply imbued with religious spirit, and crime and violence are repulsive to her. It is true in love, obsessed with the idea, she might forget herself, but in that case she is likely to do any crazy thing, whether she be permitted to remarry or, not. Woman loves her children more than herself ; even a tigress protects her cubs at her own risk. It is, therefore, unreasonable to believe that she will neglect her children for the sake of a new love ; and if by remarriage, she can better feed and educate her children, and be mistress in her own house, instead of leading a miserable existence in penury and distress, it is to the interest of the children and the society that she be permitted to remarry. (4). A widow is likely to infect her new husband with the

venereal disease, she might have contracted from her deceased husband. In this respect men are usually the guilty parties. All men should be required to obtain a medical certificate of health before a marriage license is given by the community, and a widow desiring marriage, may be subjected to the same rule.

However, the most cogent reason, for remarriage of adolescent widows is that the continence forced on her, harms her and the society alike, and benefits no body. Self-control is not always easy in the full bloom of youth, and what good is its practice likely to be? She simply curses the society with miasmal emanations, that compels her to lead a lonely, miserable life. And if she were permitted to remarry, she would radiate happiness all round by being a happy wife, and building a cheerful home, and render the community a good return of service, by producing healthy, wholesome, useful children. The practice of sati—the immolation of the widow on the funeral pyre or the grave—once a very wide-spread custom among the primitive peoples, was based on the same conception as the idea of widowhood. The primitive man believed in the immortality of the soul, and naturally being ego-centric, he wanted his wives to go with him to heaven, to attend to his service. So when a chief dies in central Africa, all his wives are buried with him, so that they may serve him in the heaven. The burial of the wives with the dead husband was also customary in old Scandinavia as the Norse Sagas say. But when this barbarous custom was abolished with the advancement of progress, and the women became more assertive of their rights, man ordained in hi

inordinate jealousy, that his wife shall not even after his departure, think of another man, and only mourn for him and pray for him. It is believed that the day of reason is dawning, and our future shall not be mortgaged to the meaningless traditions of the past.

Inter-caste Marriage: The gentry of Bengal, having the same blood, cultural tradition and common language, should intermarry, as in-breeding is a degenerative process. This infusion of new blood will act as a tonic in cultural and moral progress in the national life. There is no difference between a Brahmin, Baidya or Kayestha, nor should there be any artificial restriction in their intermixture of blood. But, if it be not yet possible to defy the caste regulations entirely, at least Rari Brahmins can marry with the Vaidika or Barendra Brahmins, the Vaidyas with the Kayestas, thus reducing as many divisions as possible paving the path for national unity. The time has not yet come for inter-provincial marriage, though it is very desirable. The few marriages that have taken place, are more or less unhappy. The fact is, that due to isolation through foreign conquests, distance and lack of rapid communication for centuries, each province has not only developed a language of its own, but also a few peculiar psychic characteristics and mental orientations, though, there is fundamental national unity, ethnologically, culturally, religiously and in the outlook of life. Thus a Bengali girl is keen-witted, sentimental, sensitive, of romantic nature, gentle demeanor and affectionate disposition, and though she is intensely emotional, intellect must appeal to her to the full.

heart. And with language, ideas have been associated. The same ideas expressed in a foreign tongue can not carry the same vibrant impressions. A love song or an endearing expression, spoken in Hindi or Marhatti to a Bengali girl, may not move her, and rather leave her cold while the same thing, spoken in her own tongue, may thrill her to her inmost core.

A common language creates a psychic unity, which no other substitute can replace, and which transcends everything else. If, therefore, inter-provincial marriage is not yet conducive to mutual harmony and happiness, on which alone marriage should be based, international marriage becomes objectionable from every point of view. We have not and can not have anything in common with an English, German, French or an American girl, except temporary infatuation and auto-hypnotism. The average Hindu student in Europe and America is found by girls to be more interesting, intelligent and companionable than the youths of her own class she meets, and if she is of the adventurous type, romance breeds in the novelty of sensation and exotic strangeness. The girls believe—many of them are of stenographer type, hardly graduates from a high school and beyond respectable marriage age—that because a Hindu is studying in Europe or America, he must be a prince, and the Hindus try to shroud their names in mystery, and girls want to marry an oriental prince, go to the orient to be surrounded by servants, flowers and song of birds. But the disillusionment comes when she reaches India. She finds conditions and society quite different, and the enchanting dream of golden romance.

ostracized by the European community, and the Hindu society is exclusive and suspicious of her. If she is of affectionate disposition, well-bred, possesses character and moral resolve, she tries to adapt herself to the new conditions of life, thinking of her mistake as irreparable and keeping it to herself. And the tragedy commences when she begins to realize, there is neither any community of interests between her and her husband, in language, religion, traditions, duties, evaluation and outlook of life. Fortunately many of these marriages are barren. Nature seems to take delight in punishing them with sterility for betraying the vital interests of the race. But when children are born, it becomes a regular, living funeral dirge. As the mother can not speak the language of the country, the children are brought up without the knowledge of the national language, literature, traditions and ethics, almost aliens in their own country. They are despised by the Europeans as mongrels, and by the Indians as Eurasians. They begin to think that their mother made a terrible mistake in marrying that dirty nigger, whom they learn to hate with a venomous hatred as the source of all their troubles. Personally, I know quite a few Indo-European and Indo-American marriages, and majority of them to my knowledge are more or less unhappy, and I have yet to know a case where such a mixed marriage has led to mutual happiness, or the products of the union have been nationalistic. The fact is we can not yet assimilate foreign blood, especially of the European stock. Personally they might like us, but nationally, we being in the servile state, they can not take pride in union

with us, and in rearing the children as nationalists, and implanting in them love of the country, its sacred lore, traditions and ethics, which they regard as inferior to theirs. By marrying foreign girls, Indians do not get an infusion of new blood, they are themselves simply lost to the community, and the children born as mongrels, despised by all, intensify the racial problems, which are already complicated. Such marriages are indeed racial treasons, as the foreign-educated students marrying their own country girls are likely to raise the cultural level of the country, by introducing advanced hygiene, time and labor-saving appliances and rational standards of life, and by infusing new ideals in their children, and preparing them for the fulfilment of the tasks they might find unaccomplished during their own life time. In exoneration of their tragic, reckless lies, those who have married foreign girls, claim that the Hindu girls are not forward, and lack the comradeship spirit. If it were so, and these qualities are desired, they can be developed in one generation, by giving the girls proper education. As far as intelligence and knowledge are concerned, some of the graduates of our female colleges compare favourably with the products of any institution, even those of the U. S. A. where the women are advanced, and have a high standard of education. It may be that our girls are modest, and they yet hesitate to exchange kisses at the street corners, and sit upon the park benches arms in arms, whispering silly nonsense, indifferent to the passers-by. But if our girls have not yet learnt the fine arts of vamping, flapping and wanton coquetry, which no body will pretend that they ought to cultivate

(yet quite a few are becoming experts and are beating their Western sisters in the game), they are adaptive, instinctly romantic and intensely emotional, of gentle demeanor, and of affectionate and sweet disposition; they bring repose, harmony and tranquility at home, by their unquestionable conjugal fidelity; never-complaining, always patient and forgiving, they become the most dependable devout friends, loyal to death, excellent wives and unsurpassed ideal mothers. It is certainly a pity that some of our countrymen have been deceived by the alluring color and superficial veneer of culture, and did not possess more than skin-deep knowledge, to appreciate the psychic qualities, which alone are of permanent value, and thus they are partly lost, and their children miserably so, to the country, which certainly had a right to expect better service and contributions from its foreign educated men.

Prostitution: Prostitution seems to be a time-honored institution. It is mentioned in the *Rik-Veda* and the oldest book of the Bible—Genesis. It has followed civilization in every stage of its tortuous course. It has been often defended as the necessary evil—the guardian of the family, sanctity of home and virtuous women, by releasing the abnormal sexuality of unbridled men in the least harmful channel, which if prevented, would have been expressed in seducing virgins and the virtues of honest women, thus insidiously corroding civilization, at its pivotal point.

In former times, the society and the church exercised a kind of censorship over the conduct and the behavior of the people, as almost every one was personally known to each other in the community,

which had a salutary influence in restraining the morbid instinct of vicious characters. The phenomenal city growth is entirely modern and recent. Here thousands of young men are compelled to live single and away from their family for economic reasons, and can express their evil propensities unrestrained of any fear of neighborly criticism and reprimand, as in cities very few know each other, or have time to concern themselves in other people's affairs. The allurements of a large city attract also thousands of men who have no aim and ambition in life, for licentious orgies and dissipation. The sexual instinct being imperious, and incessantly roused beyond control by dramatic erotic presentations, leud songs, suggestive dances, sensual and sentimental vulgar novels, pornographic arts, and the heedless nervous gay life of the city, the demand creates the supply, and the supply for its maintenance exploits and victimizes thousand others who lack will-power and moral stamina.

Prostitutes are plague-pots and the foci of venereal infections. A prostitute gets usually infected within a fortnight in plying her trade. And on an average, she vamps about three victims daily to maintain herself. It is estimated that a city like Calcutta or Bombay harbors more than 15,000 professional prostitutes. They therefore, in each city infect about 45000 men in the prime of life daily, and 16,425000 that is, about sixteen and a half million men annually. It staggers imagination to think how many sweet and happy homes are wrecked by it, how many countless children are born blind or with deformities, what miseries it causes by still-births, invalidities

of mothers and severe economic losses. The nation certainly pays a heavy toll for prostitution. It is said that it is only the characterless profligacies that pay the price for their debauchery, and their suffering and punishment are warning lessons for others. But they infect their innocent wives, train their children, and thereby affect the society vitally, and the society can not remain indifferent to the plague-spots that disseminate such virulent contagions as gonorrhea and syphilis. It is said that as one is free to sell one's voice or intellect for pecuniary advantage, a prostitute should enjoy the same freedom, to barter her service if she thinks it fit, and society has no right to restrain her from her legitimate business. But her touch is not only vitiating but also contagious, and she spreads infections in the performance of her commerce. Society therefore has an inalienable right and duty to uproot the obnoxious growth which is causing her positive harm. In Europe prostitution is officially acknowledged as an institution and tolerated as a safeguard against the social integrity, as there is a large number of unmarried, industrial workers, who can not afford to get married, and the prostitutes are registered, periodically examined, and those who are found with the pronounced virulent symptoms of contagious infections, are segregated in hospitals for treatment, and are not released until the manifest contagious characteristics are suppressed, for it is, almost, impossible to cure a woman either of gonorrhea or syphilis, especially a prostitute, who is exposed to constant infection. And though this system is much better than that of England and U. S. A. where prostitution is not legally acknowledged,

yet venereal diseases have not been stamped out of Europe, rather its ravages are undermining the structure of society. The best thing, therefore, is to treat a prostitute as a criminal, to lessen the temptation of many thoughtless youths, to encourage the marriage of adolescents, based on mutual love, and to impart ideas of the sanctity of home and family, and the glories and responsibilities of parenthood.

Joint-Family System : The joint-family system is the survival of the clannish life, in which the oldest member whether patriarch or matriarch, becomes head of the family and rules all other members with equity, justice and wise counsels, preserving peace, unity and harmony, as is expected from devout venerable old age. Earnings of all members of the family are brought to the common custodian, who distributes them with shrewd discrimination to each individual member according to his or her right share, needs and necessities. Such an organization has many advantages. It pays reverence to old age, and surrounds it with affectionate considerations and solicitude, which are its due, instead of sending, as in the West, the old people, who have worked hard to maintain a large family, and have been unable therefore to save anything for themselves, either to the Poor House or putting them out on the street. This disrespect to the old is one of the reasons why many men and women in the West are shirking parenthood. It maintains with due respect every member and relative of the family, whether he, or she be sick, helpless, infirm, widow or orphan. One does not work and live for himself, his wife and children alone, but also for the rest of the family, and

this keeps the soul plastic, adaptive, sympathetic and responsive.

Of course such a system has many draw-backs, and in many respects the modern life has made an empty mockery of this time-honored institution, and it has outgrown its usefulness, and many evils have entered into it like a cancerous growth. It takes away personal initiative. Necessity stimulates inventions and progress. One feels the serene security of the protection and support of the family, and he remains indolent, and there is no impetus for his utmost efforts, as the fruits of his labors would not belong to him alone, his wife and children, but to all members of the family. It encourages early-marriage as a family alliance, taking the responsibility of supporting the bride and training her up gradually to family obligations. Hunger and love, self-preservation and reproduction, have been the two mighty dynamic forces for the progress of the world—inventions, adventures and discoveries, art, poetry, culture and civilization. Joint family system, unconsciously and indirectly, saps the vitality of these two potent motive-energies. It is a notorious fact if one succeeds in life in India, he becomes importuned for help and assistance from numerous near and distant relatives, and they are not ashamed to live, as parasites, on him without returning him any service whatsoever, though they will think it beneath their dignity to earn an honest living by work, which they believe lowers their social position and standard. It is true that one should not live for himself alone. That is an unworthy selfishness. One should help the weak and the sick, helpless orphans and the aged,

especially, if they are related by blood. It is indeed, a very ennobling, inspiring and beautiful social characteristic of the Hindu life, that one shares his food on equal terms with all those, who need his help, and the guests. Perhaps, the importance of the survival of the fittest in the struggle for existence, as a process of evolution, has been over-emphasized and exaggerated. Mutual help and co-operation have been no less vital factors in the progress of man. The strong family-tie, and the reverence for the ancestral home have, perhaps to a great extent, preserved the integrity of the Hindu social structure in the vicissitudes of foreign conquests, and it did not succumb like that of Persia and Egypt. Yet, it is probable that instead of eliminating the unfit, in the natural process of the struggle for existence, by maintaining them by family protection, and making it possible for them to reproduce, the race has degenerated. It is better that those who prove their unfitness in the struggle for existence—which is very often a good criterion of their worth, are not allowed to reproduce by family connivance and help, thus degenerating the race, by transmitting the qualities that have demonstrated their worthlessness. This may sound unkind and inhuman, but it will be uplifting to the race. We want our best people to reproduce, and not the worst, otherwise civilization will be submerged by the underworld. The race must be regenerative and not degenerative, which can be best done by the rapid multiplication of the best elements of the populace, who have proved their worth by sound body and mind, intellectual keenness, and economic fitness to support

themselves, their wives and their children, and to give them proper education, so that they can march in the vanguard of progress.

Population : The population of a country is regulated by its food supply, and is always at its optimum. When Europe vastly increased her food resources by extensive colonial possessions and their economic exploitations as well as by a very remunerative foreign trade, she doubled her population in the eighteenth century, and trebled it in the nineteenth, having barely 100 millions, 200 years ago, to-day possessing more than 600 millions ; while the population of Asia and Africa during the same period has remained almost stationary, if it has not actually retrograded. And though fecundity and birth-rate among the primitive, savage and backward peoples are larger than among the civilised peoples, the civilised peoples increase much faster. The mechanism is complicated, and the controlling factors are many. The high birth-rate* is counter-balanced by excessive child-mortality due to ignorance poverty and lack of hygiene, as can be exemplified by the case of Bombay where for 1000 children born 640 die in their infancy, while in London only 80. Fertility is counter-balanced by pre-puberal intercourse, which shortens the reproductive period, as can be evidenced by the fact that a Hindu girl begins to conceive at 14 and ceases at 30, having almost senile appearance, while at that age a modern woman is in full bloom of her youth, and though she does not usually begin to reproduce before 18, she reproduces until 48 to 50, and

* The doctrine of Malthus.

it is not so very rare for her to have 15 to 20 children. Prolonged lactation also exercises its inhibitive function over the birth-rate. Mal-nutrition, venereal diseases, lack of hygiene, pestilence and famine do the rest in controlling the population to the optimum of the food supply at its disposal. Modern society is adopting contraceptive method for birth-control, while the more religious-minded Hindus ordained celibacy for the Buddhist monks and nuns, and forbade the remarriage of widows.

Birth-control : Population has not yet reached, and is still far off from reaching the saturation point of sustenance. No body will pretend that the earth is over-crowded with human beings. The primitive man required a large area of land to live by hunting alone, and when the game was exhausted, he had to migrate to an adjacent territory for his food-supply. When he learnt to utilize starchy berries, fruits and tubers, with the supplementary contributions of hunting and fishing, a much smaller area was needed. But the land which barely sufficed for a primitive family to eke out a miserable existence, by agricultural pursuits and domestication and breeding of animals, hundreds of families can live thereon with comforts. It is very likely that the present inhabitants of the earth, about 1700 millions, could live comfortably with the products of the Gangetic, Nile, Mississippi and the Amazon valleys alone, under intense cultivation with appropriate fertilization, and with improved cattle-breeding. Millions of acres of land are lying idle, millions more could be reclaimed from swampy areas by drainage, and by irrigation from the desert. The ocean, as the

infinite reservoir of food-supply, has hardly been tapped. It abounds in fish, rich in protein and fat, and sea-weeds rich in carbohydrates and mineral bodies. So there is no valid reason yet for using contraceptive means to prevent the excess of population reaching the safety margin of food-supply. Moreover, the human instinct as it is, will lead to war for the possession of the coveted land in the struggle for existence, thus preserving the equilibrium, as well as improving humanity, for the victors demonstrate by their victory certainly some positive superior qualities over the vanquished, as physical valor, intellectual vigor etc., without which offensive and defensive machinery of warfare can not be invented and effectively used.

Painful and pitiless indeed has been the human progress. It is often said that war harms the victors and the vanquished alike, by killing during the warfare, the fittest and the bravest, and leaving reproduction to cowards, the sick, the disabled and the old. But the victorious nation makes up the loss by having increased food-supply at the cost of the vanquished, either in the form of direct transfer of land or economic privileges, which means the same thing in advanced civilization, and a victorious war has been always succeeded for a decade by a sudden increase of the birth-rate. In primitive life, individuals fought against each other with bare arms, or with sticks or stones for the possession of the coveted lands and the goods. Then, the tribes. Now nations are fighting each other for the same thing. The next wars will be racial, until humanity is merged into

undistinguishable stock, either through elimination by destructive modern warfare, gradual depopulation of backward peoples through increased economic disadvantages and disabilities, and intermixture of race on an extensive scale by rapid means of conquests, of inter-communications, travel and trade, obliterating gradually, racial landmarks and characteristics. With rapid communication and internationalization in the economic and political sense, as the white man though inhabiting only two-fifths of the surface of the globe, governs to-day about nine-tenths of it, his armies mastering the continents, and the navies encircling the seas, human science remains no longer a monopoly of one nation but is being internationalized and widely diffused. In intellectual development all races have almost the same potentialities. In brain capacities, the modern European is not much superior to the paleolithic man, but he excels him in the environmental influences only, that is, in the transmission of the stored up knowledge, that has accumulated through countless ages and in their practical applications. In the categories of thought he is superior to him, but not in the size or volume of the brain, or in the quantity or quality of the neural cells. Therefore for the assertion of the national or racial rights, the biologic vitality and preponderance will be the decisive paramount factor in future. Any nation or race that deliberately shirks the responsibilities of parenthood, for the sake of personal pleasures, seals its own doom. For the inventing human genius will surmount the limitation of the food-supply. With the rapid deforestation, there was a fear that the fuel-supply would run short within

2 or 3 generations. The discovery of coal has made wood out of fashion as the source of energy, and added to the fuel resource a long lease of life. To-day petroleum is supplanting coal, as coal supplanted wood in the nineteenth century. Before the oil resource will be exhausted, hydro-electric power is going to be in the vogue, and this power may be generated from numerous sources, as the coastal tides, the wind and the solar rays. So for racial supremacy, the biologic factor will be of supreme importance.

Moreover all contraceptive means adopted, are repulsive to refined women, and are injurious to health. And they are usually practised by the middle-class, the best elements of the nation, that needs especially to increase for the regeneration of the country, if the race is not to sink to the lower level of culture by the rapid multiplication of the under-world. Gynecologists tell us that there are vital clusters of nerve-centres in her uterine and vaginal walls whose modus—their tonicity and relaxation, their stimulations and depression—reflects on her sentiments, thoughts, feelings and judgment. Pleasure has been associated with the generative act, just to facilitate reproduction, and one must indeed pay a heavy penalty to frustrate the supreme purpose of the biologists. And the population in India has, by no means, reached the limit of the saturation point. The last census shows that in the preceding decennium, the population has hardly increased, and the increment has been gained from the lowest stratum of society, and the middle-class, custodian and the hope of the future, is slowly

out. And vast tracts of land are lying idle which can be recovered for agriculture by irrigation in the Punjab, United Provinces and Rajputana, and by drainage in Sunderbans and Eastern Bengal, adding immensely to the food-resources of the country with modern methods of intense cultivation of the soil.

IV.

EDUCATIONAL REFORMS.

Education : Education is an attempt by the old generation to shape, by instructions and examples, the development of the coming generation, to its own ideals of life. Thus the Hindus being religious by temperament and traditions, their whole life being a preparation for the hereafter, aimed in their education, at the acquirement and interpretation of the knowledge of their sacred literature. Of course, it is true, that the Hindu conception of Dharma is not exclusive but is inclusive of all human activities, and embraces a vast and extensive literature in all domains of human thoughts, but none-the-less, it is practically of no value for the modern life except for antiquarian research. A History of the Sanskrit Literature, written in the vernacular, within the compass of a volume, emphasizing all the salient points of the contributions of the Hindus to the world's progress in arts and sciences, will familiarize a student with Hindu thoughts and culture much better than one hardly acquires in even twenty years' study in the 'Tols.' The Moslems believe that the Koran is the revelation of God and the depository of all true knowledge, and so the Islam has aimed in its educational policy, at the acquirement of the knowledge of the holy scripture and its right interpretation. That this knowledge acquired at the cost of useful information, is sheer waste of time and educative m-

goes without saying. The British Government aimed in its educational policy in India, to produce a cheap supply of English-knowing men, who would assist in a subordinate capacity, acting as intermediaries between the government and the people and in the clerical positions of the mercantile firms. The British Indian universities are still engaged in manufacturing clerks and lawyers. The Hindus must realize that much water has flowed in the Ganges since the time their Upanishadas and philosophies were composed, and the world has made immense progress in the meantime, and that in the twentieth century alone more progress has been made than in all the preceding centuries, and the Hindu cosmogony, physiology and astronomy would be a laughing stock of a high-school girl, and if Kapila and Plato were born to-day, they could not pass a graduation test in a common school. The Moslems must understand that if Jesus Christ or Mahomet were to appear to-day preaching their crude conception of God, they would be sent to the lunatic asylum without much ceremony for psychopathic treatment. British statesmanship ought to be sagacious enough to know that if India is to be an asset instead of a liability, she must be wealth-producing, instead of being impoverished which is a breeder of discontent; and wealth can not be produced without industrial development which requires education in pure and applied science. The British Government of India spent for the education of 318 millions people only £ 14·89 millions, though it could spend £ 60·09 millions for military service alone, while the New York municipality appropriated for the same

year 52·754 million dollars for the education of its barely four and half million people.*

This miserable pittance for education is often defended on the ground that Law and Order must have first claim on Indian revenue, as no progress is possible without their preservation. But Law and Order are meant to safeguard life and property. In India life is held very cheap, as millions are swept away every year by famine and pestilence. As to property the majority of the population live on a chronic starvation diet, and their habitation is wretched over-crowded hovels, and they sleep on bare unwholesome ground. So the preservation of Law and Order is an empty mockery to them. It is true that the progress is dependent on the maintenance of peace and order. But the British fleet is the most powerful naval unit to-day, and circles the seas. India is bounded on all sides by an ocean girdle, except on the north-west where the impregnable Himalaya stands as the ever-watchful sentinel except through a few narrow passes, which can be easily protected by a few modern machine guns and æroplanes. The frontier tribes and Afghanistan lack the latest military equipment and industrial development, which are essential for modern war, and by their ignorance and fanaticism, if they show a turbulent spirit, a few laughing-gas (nitrous oxide, an asphyxiant) bombs will make them innocuous. There is no fear of any serious internal disturbance. The people are unarmed and

* The New York City Budget of 1923 has allotted 101·5 million dollars for education, and 54 millions for health. It has been estimated that the U. S. A. spent 764 million dollars in 1918 for Public School Education alone.

disarmed, peaceful and law-abiding. If there is now and then wild and irresponsible talk by visionary young men, education will sober their judgment, and their vaporings are likely to be good safety-valves and amusing diversions. For internal order, the ordinary police force is sufficient. The enormous military expenditure ought to be greatly reduced, and the fund utilized for education and hygiene.

The country vitally needs free and popular primary education, a large number of secondary female schools, a school of pedagogy with extension courses, an agricultural college with a model experimental farm, and a well-equipped technological institute in every district. The teachers in schools, colleges and universities should be selected not on the principle of favoritism or the percentage basis of race, religion, nationality or political affiliation, but on the primary qualification of knowledge and the ability of teaching.

And though it might sound ludicrous and may hurt the sensibilities of a few of our super-patriots, the employment of a few qualified foreigners even to teach us Sanskrit, as Paul Regnaud in Comparative Philology, Winternitz in the History of Sanskrit literature, Bloomfield in the Vedas, Hillebrandt in Vedic Mythology, Aufrecht in Sanskrit Manuscripts, Keith in Ancient Indian Philosophy, may profit us immensely. The fact is that though Sanskrit is our sacred language and very similar to our vernacular, and though it is very difficult for a foreigner to master it, yet more research works, translations and interpretation of rare Sanskrit manuscripts are issued in Germany, England and France than in India. And if we do not soon shake

off our lethargy and adopt modern methods of teaching Sanskrit, we may ere long find it necessary to send students to European universities to learn their own sacred language. And indeed, the British Museum Library, Bibliothéque Nationale of Paris, Bibliothek of Berlin or Munchen contain more Sanskrit books, their translations and interpretations, better arranged and classified and easily accessible for ready reference, than there is to be found in Calcutta, Benares or Poona. And we have not even a Sanskrit dictionary comparable to the monumental Sanskrit Wörterbuch of Böhtlingk and Roth, or Monier-Williams' Sanskrit English Dictionary. The best we have is '*Savda kalpa drum*' which is undoubtedly, a very valuable and useful compilation, but it is too old-fashioned, and the results of the recent philological researches have not been incorporated into it. The Rig Veda, the professed supreme authority of the Hindus, has not yet found a reliable translator among them, though Ludwig and Grassmann have translated it more than sixty years ago, and Grassmann's Wörterbuch zum Rig-Veda is still a standard authority. Pali, the sacred language of the Buddhists, whose literature is extensive and important, has found very few devotees in India. To speak the plain truth, our contributions to the understanding of our own ancient literature and civilization have been mighty poor, and lamentably much poorer than that of foreigners. We have not even a History of the Sanskrit Literature, though even in Spanish Language there is one (La Literatura Sanskrita, Luis-Michand Parid), a work which could be translated with benefit, for the Indian readers. Here we can not reasonably complain lack

of opportunities and scope, though they may be rightly attributed in other spheres of activities, for we have a decided advantage over foreigners in learning Sanskrit. And even if opportunities are missing, a nation with Consciousness should surmount difficulties and create opportunities favorable for its growth. In science, of course, we lack stimulus, traditions, official encouragement and help, experimental training and competition, and workers are very few, and their experience is more or less limited to theoretical knowledge, and under these circumstances, it will do well to employ authorities from abroad who possess deep and wide theoretical and practical knowledge, and are competent to teach.

Library : Library is becoming a very important auxiliary to education. The circulatory library serves the purpose of an extension university course on a wider scale, reaching even the remotest hamlet, thus sing knowledge broadcast, it becomes the most dependable and profitable culture medium of a country. In the U. S. A. there are more than 10,000 national, university, municipal, subscription and travelling public libraries, having more than 1000 volumes. India vitally needs the development of a library system, that will enable any one to consult a book, or borrow it for home study, after giving satisfactory reference, that the books withdrawn, if lost, will be replaced, or its value indemnified. The majority of our middle-class who are intellectually inclined, are miserably poor, and they are usually at odds how to have both ends meet with their cultivated refined taste. They can hardly afford to buy books, when all their means are

usually exhausted to keep up appearances of decency expected of their social contact and position, even at the cost of a half-starvation diet, and the consequence is, that inspite of all their earnestness they can not follow their respective lines of study by subscribing to periodicals and books on the subject, and for lack of cultivation they gradually lose interest and forget things they had learnt in their school and college days. A University course is after all a cultivation of intellectual taste, and to follow up the study at home with discrimination. It simply forms the habit, and trains the mind in a wise selection of books, to understand their salient points of intrinsic worth, and to utilize them for his further studies, investigations and researches. But with the completion of the university course, real study should begin, and not end as is usually the case in India, for lack of books, materials and opportunities. Libraries are as important as schools and colleges, if not more so, as they have a wider scope of usefulness, and contribute to general education. The library in a true sense is a poor man's self-educating university. But, even a rich man to-day, can not afford to buy all books. The library, therefore is indispensable to a civilized community, or for lack of general knowledge, the masses will remain backward, and sink to barbarism. New York City, which has most prosperous and industrious citizens, has a free public library with 44 branches, scattered in every convenient part of the city, gave 8135 cards for borrowing books for home use, five books at a time, 284666 readers used in August 1922 the reference section, and 662,389 books were loaned for home use.

For the same period. It may be said that the Indian cities have not the money at their disposal that New York has. But a National Reference and Circulating Library with the present Imperial Library for a nucleus, would make a good beginning. The Copyright Law may be amended like that of Canada to the effect that its privilege will be granted to books solely printed in India, and six copies of the same to be submitted free with a fee of one rupee, to be distributed among five provincial libraries at Madras, Bombay, Lahore, Benaras and Calcutta, and one copy with the National Library to which a Copyright Office may be suitably attached. Every university, college, school, and municipality should be compelled to keep a public library as a condition of the charter, and any copy not available in the local library may be ordered from the provincial library, if not available there, then from the National Library post free, thus combining all the libraries in one link for national service and economy. For the reserve fund, to repair the wear and the tear of the books, for re-binding, as well as to prevent unnecessary borrowing as fashion, a half-anna charge may be made with the application for the loan of each book. Though Indian students show a high degree of intelligence and resourcefulness and intellectually inferior to none, yet their contributions to science and arts have been very insignificant, and positively inferior qualitatively and quantitatively to that of small nations like Switzerland, Sweden, Holland, Denmark and Belgium, and that of the oriental nations even Japan and China, perhaps, due to the reason that scholars after graduation do not find

adequate library facilities and opportunities to enlarge their knowledge. .

Philological Bureau : Though almost all the scripts of India except the Urdu, are variations of 'Brahmi lipi', and their phonetic value is the same, yet they have, due to lack of rapid communication in the past, developed into almost separate characters, and are hindering to-day national intellectual intercourse. It can be easily remedied by teaching 'Deva-nagari' character in every school in India in addition to the local script in use. In good literary form, about 80 p. c. of the words used in Bengali are Sanskrit, or of Sanskrit derivation, in Hindi about 70 p. c., in Marhatti 65 p. c., Gujrati, 60 p. c., and in the Dravidian languages too, there is a quite rich admixture of the Sanskrit. If therefore a uniform script were adopted, it would facilitate very much understanding and reading the literary production of one province, in other provinces, especially, among the Indo-Aryan language-speaking groups, thus paving the path of national thinking, understanding and unity, as well as creating a common national language for the future, for no one will deny that a common language is a great bond of unity, and language subconsciously, slowly but positively, moulds psychic characteristics. All the Bengali speaking people have almost the same psychic traits. The Polish-Germans are Germans to the heart. A German educated in French schools adopts with it its literature, its customs and habits and outlook of life. Even a study of the literature itself subconsciously orients the mind. The difference of language, therefore, is a great barrier to national unity, but

there is not so much difference in the language as that in the script. In Assam and Western Bengal the spoken dialects vary from each other to such an extent as to form almost two languages, but the common Bengali script has made it possible for the literature, periodicals and newspapers of one province to circulate in the other, and thus prevented the formation of a new language, and preserved the Bengali characteristics alike in both provinces. Indian languages were really provincial dialects, and they only formed into separate languages due to lack of rapid intercommunication and intercourse, and political isolation.

A national Philological Bureau is needed to coin scientific nomenclature out of Sanskrit as much as possible, and to introduce them into the provincial languages so that a uniform terminology is adopted all over India. The bureau should be divided into various departments as medical, biological, botanical, technological, chemical, general, scientific, and for words in modern uses. Each department should consist of about half a dozen experts thoroughly versed in their subjects as well as in Sanskrit, and after mutual consultation, agreed words should be published in the newspapers for suggestions from the public, whether better words can not be found for the purpose, before they are finally accepted. The words should be simple, expressive, conveying the meaning, and if such words can not be found, the international scientific words may be kept and introduced into the language with advantage, without unnecessarily burdening it with words which can be understood only by their equivalent English terms.

Spelling reform also is badly needed. In speaking hardly any distinction is made between long and short vowels, 'n' and 'n', 'b' and 'v', 'ṣ', 'ṣ' and 's'. But in writing, phonetic accuracy is required, thus requiring a good deal of mental concentration and attention from the scholars, which otherwise could be advantageously released for the acquirement of more important and useful information. It does not mean that we shall adopt reform spelling in the edition of our Sanskrit works, but in every-day use, newspapers and periodical literature, it is likely to prove very economical in time and labor. It will also reduce a good deal of printing expense, as well as facilitate the invention of speedy typewriters which are needed for modern business correspondence. And the adoption of the continental decimal system in measures, weight and currency will eliminate much unnecessary work and energy in their calculation.

Newspapers : Newspapers are every day becoming public educative agents, and they are already powerful factors in shaping public opinion. The tremendous influence, newspapers exert on the public mind, can not be ignored. The function of the newspaper should not be banal like that of a merchandise, simply to supply the demand, as a commodity of news, but to educate the public for wider universal intellectual interests, to promote civic responsibilities and duties, and to give useful information in popular language. In Europe each class has its own newspaper, suited to its taste and temperament. In the U. S. A. newspapers are not meant to cater to any particular class, e. business and technical journals, but ~

public, and they have immense circulation; some papers reaching a million copies daily. This large circulation naturally brings very remunerative advertisements, which usually pay for the printing and the production of the papers, and the subscription money remains almost the profit balance. The newspaper enterprise in America is really remarkable. The Sunday editions of the daily papers give about 100 pages on well printed good paper, with many excellent illustrations and photographic reproductions of miscellaneous reading matter, for 5 cents only, the paper alone weighing more than two and a half pounds and costing about 10 to 12 cents. It is true that India can not have this large source of income from advertisements, as the big business is mostly in the hands of foreigners, but the Indian newspapers by consolidation and by imparting useful information on hygiene, legal rights, popular science, national and international literature, can create huge circulations. Many papers in America, which have no close political, commercial, social, cultural or consanguinous relation or interest, give more information about the political structure and developments in India, her arts, literature, archeology, people and religious beliefs, than are printed in any one of the Indian papers, which are printed in India and meant for the Indian people. The Indian papers unduly devote more of their columns to the utterances and discussions of some British political mountebank, opportunist or buffoon, than to the elucidation of their own philosophies, ancient literature, ethnology, questions of hygiene, social reforms, industrial and agricultural development. It is, indeed, a pity that

Indian papers, Indian journalists and publicists have not yet realized that the future and the progress of India do not lie so much in futile political controversies, as in increasing the food-resources, improving its hygiene and raising the cultural level of the country.

Translation Bureau : Ignorance is rightly the cause of all miseries. Ignorance and non-observation of hygienic and dietary principles cause ill-health and sickness, ignorance of economics results in poverty and destitution ; ignorance of natural laws cause all kinds of mental perturbations—fear of ghost and goblins in the rustle of the wind and the raging of the storm, and the vengeance of gods in the lightning-flash, thunder-crack, famine and pestilence. One can be free from baseless fear only, when the laws of natural phenomena are logically understood by irrefutable proofs of scientific reasoning. To dispel, therefore, the superstitions of the masses which are crushing them and extracting from them tributes, more penalizing and debasing than any revengeful ruthless conqueror could devise—tributes in a perverted outlook of life, in time and energy spent in seeking the good grace of the holy ghosts and to appease the malign spirits, the propagation of popular scientific literature, especially natural history, anthropology, sociology and hygiene, is imperative. Ignorance is the worst enemy of man, and knowledge is his best friend. The vernacular literature consists chiefly of sentimental and mystic poems, flimsy fictions, translation of religious books and their exposition after medieval fashion. Their study for anything except relaxation and to form literary taste, is a sheer waste of time and energy. The vernacular literature

must be enriched, for it is the popular vehicle of information, as is being done in the Japanese language by translations of important and useful foreign, general scientific works. This stupendous task can not be accomplished by individual exertions, but only by organised efforts. At least in Bengal, United Provinces and Gujrat, committees should be formed, and competent persons delegated for the translation, and there is every reason to believe that Bengali, Hindi and Gujrati are well-adapted for the purpose. The Swedish, Danish and Dutch languages which are spoken more only by a few million peoples, have an extensive scientific literature. Yet the Swedes, Danes, and Dutch can easily afford to keep their high standard of culture, as German books are accessible to them, being very similar to their language, and almost every student learns to read German and French in the preparatory school. If these small nations with their limited resources, and Japan, neither very rich or much literarily inclined, have been able to develop a modern scientific literature, India should not remain behind them. It is hard to find in the Japanese or Swedish language a popular scientific and literay work of merit either in English, French or German that has not been translated. Can Bengali or Hindi boast of that ? We can not expect to create an original scientific literature of our own, before we have reached the cultural level of other nations, who have been longer in the field, and the best way to attain it, is to disseminate their meritorious works in the popular language of the vernaculars. The best sanskrit, Pali, Arabic, Chinese and Persian works should also be translated in order to create mutual understanding and unity of the oriental nations, and to have

a broad universal culture. Our best works should, also, be systematically translated into English, French and German to have our contributions to human culture and progress rightly understood, esteemed and appreciated.

Publishing House : To propagate our culture at home and abroad, to introduce the world's best literature in the vernaculars on a large scale, the establishment of a well-equipped printing and publishing house, is necessary. Such an organization is likely to be self-supporting, if not a paying concern. It is indeed a lamentable fact that even some of our nationalists, who complain that India's wealth is being constantly drained off to England by economic exploitation, have not yet been able to give up their slavish mental attitude, and are under the hypnotic delusion of believing that if a book is printed in a British printing press and carries the stamp of a British publisher, it somehow mysteriously serves the 'national purpose better than if it were printed in India. They contend that a book issued by a British Publisher is better printed and bound, freer from orthographical errors, and receives a wider international circulation than if it were published in India. And so though it costs much more to bring out a book in England, for it is not usual for a British publisher to undertake to bring out a book of an Indian author on a specialized subject which has only a limited sale, unless all the expenses are met by the author, or his patron, the typographical cost being very heavy, owing to the presence of Sanskrit transliteration words or sentences which require highly-paid compositors and proof-readers. Though the cost of publication is greater in Britain, still some claim that the money is not wasted, but well-spent

in spreading the Indian culture abroad. Vanity may thus flatter the easy conscience, but it serves no Indian cultural cause. The Indian people, who should benefit by the researches of their own scholars, receive scarcely any advantage, for though the printing expenses of the book are paid, the storage, commission and handling, eat up more than the profit from the sale of a few copies, and the book necessarily has to be expensive, and it is beyond the means of the average reader. Several copies are sent to periodicals for review, and a few copies are sold to libraries, which lie dust-covered in corners. I wonder how many Indians could buy and have read Jagadis Bose's 'Comparative Electro-Physiology', Brajendra Seal's 'Positive Hindu Science' or Surendra Das-Gupta's 'History of Hindu Philosophy'? Yet these books could be produced in India at a fraction of the cost, and sold for two rupees a copy with profit to the author and to the country. There is no lack of modern well-equipped printing presses in India. And if there is, it would be a good investment to purchase them from abroad. Typographical and orthographical errors, which seem to be the concomitant evils of Indian printing, can be easily remedied by better preparation of the manuscript, preferably by type-writing, and the employment of more competent and educated compositors and proof-readers, than at present is done. For printing one or two thousand copies which is the usual limit of Indian books, it can be done much cheaper in India than any where else. It is only on a very large scale of production above 10,000-15000 copies, the European and American printers can beat us by the use of the most recent time and labor-saving type-setting, printing

and binding machines. For international distribution and circulation, large book-selling agencies in London, New York, Paris and Leipzig can be profitably employed, and who will be only too glad to do the work effectively for a good commission. And it should be realized by the authors, publishers and the public that a large circulation of a book with a small profit on each book, gives a better return of service to all, than a high-priced volume with necessarily limited sale. A large and up-to-date printing and publishing establishment is needed in India to produce good, well-printed books at a moderate price, so that the money now wasted in England, could be saved for India, and at the same time doing immense benefit to the country, by popularizing the intellectual products of our scholars. A cheap edition may be advantageously made for the Indian reading public, who are poor, and as majority of the books are, not read more than once, ordinary binding with paper cover is sufficient. For libraries and for foreign countries a better and more expensive edition with good paper and binding, can be easily arranged without raising the cost of production for home consumption, who badly need good, inexpensive books. A Central Agency, to collect all desirable books from all Indian publishers to distribute them in India and abroad, is also needed to minimize the cost of handling and to facilitate their extensive distribution. In this age, every business must be organized, and the book business is no exception to the rule. And indeed it is one of the noblest of professions, for a good literature exerts a tremendous influence in framing character, morale and ideals of a people.

HYGIENE.

There is a very strong popular misconception that a tropical climate is devitalizing to health and intellectual energy, and for strong physique and intellectual vigor the bracing, cold climate is essential. It is simply confounding the effect with the cause. It is true that the rigors of cold have eliminated the weaklings, leaving only the strong to survive, and thereby in the temperate zone an energetic constitution has been developed. And to protect the body against the biting cold, warm shelter and clothing were necessary, and to provide food for winter-confinement when the earth is covered with a thick mantle of ice and snow lasting from 5 to 7 months, intellectual development became imperative to survive in the struggle for existence. While in the tropics one can live under the shelter of a branching tree, and subsist on hunting, fishing, and picking fruits, tubers and taproots, and by primitive agriculture in fertile valleys and deltas, and consequently indolent and improvident habits have been formed. But this does not mean that a tropical climate is unhealthy, or that in the tropics, intense intellectual exertion is not possible. The Indian people have, to a certain extent, inherited the physical, mental traits and traditions of the Indo-Aryan people, who came from a cold climate. Some of the indigenous African tribes have a powerful constitution which depends on the food-supply and habits of life. The Mongolian race is

all-noted for its indefatigable energy, industry and keen intelligence. Intellection is probably not an inherited faculty, but is developed by environmental stimuli—traditions and education. In a cold climate, a good deal of labor is needed to keep oneself warm, and diseases are no fewer than in the tropics though of different kinds. The tropics can be made as healthy as the temperate zones, if the same cares are taken to improve hygienic conditions of the country. In the tropical region, one does not need to devote the products of almost half of his labor to keep himself warm, and can live pleasantly in the open air. And moreover India possesses all climates within her border in a day's railroad journey. Those who find exhilarating effect in the rapid change of weather, can easily enjoy them. The Nilgiris are noted for their soothing, scenic charms and perpetual and vernal balmy air. The Himalayas enjoy all climates according to the altitude. When the Punjab plains are parched in summer and the wind blows in mid-day as from the mouth of a fiery furnace, the middle-Himalayas, in the midst of gorgeous scenes, have always cool and refreshing breeze. When the monsoon comes to Bengal like a deluge, and the province seems to be soaked in a steam bath for a couple of months, the Rajputana sky remains azure and serene. However all that is necessary to make the tropics healthy, is to have abundant supply of pure drinking-water, to improve sewerage and drainage systems, to fight out infectious and contagious diseases, and to adopt rational dietary and regime.

Drinking Water : Water is essential to life, and pure drinking water is needed for the maintenance of

health. The supply should not only be abundant, but also free from organic matters and pathogenic contamination. Even rain-water which is comparatively free from foreign matter, contains a good deal of impurity, especially in the first shower, absorbing in its passage through the lower airy region numerous bacilli, micrococci, pollen of flowers and grasses, spores, of fungi, carbon dioxide, and perceptible traces of ammonia, combined partly with nitric acid, which is produced whenever it is associated with a lightning flash (electric discharge in the atmosphere). The river-water contains a good deal of suspended matter according to the composition of the bed it traverses in its journey from the source to the ocean, and may be also contaminated during its passage through thickly populated districts with excrementitious matter. This indeed is of serious concern to the communal health. For the feces are not only rich in organic nitrogenous matter, but are also, an excellent culture-medium of pathogenic, infectious germs, which it might harbor. Thus infection might spread wherever this polluted water is drunk without being sterilized. Fortunately, the nitrogenous organic matter dissolved in current water is speedily disintegrated and transformed into ammonia and other comparatively harmless products by certain kinds of bacteria, and the ammonia in turn is converted into nitrous salts and nitric acid by bacterial action and atmospheric oxygen. The water containing organic matter, or ammonia should be avoided for drinking purposes. Well-water may be, likewise, contaminated by the influx of organic matter, if it were situated by sewerage or fecal discharges. Lake water is relatively

pure, if the mountain slopes from which the rain and molten snow feed the lake, are free from soluble components. Spring-water, as it comes to the surface, having filtered through various strata of the earth, is free from suspended matter, and is rich in dissolved minerals and gases. It is therefore, a wise precaution to filter water through a sand bed, where there may be the least suspicion that the source of the water-supply is not free from all objections, and then to boil it, and to filter again through a sand bed, and ærate it before drinking. Though the interstices of the sand are many times wider than that of the microbes, yet a thin film formed upon the sand bed by mineral and organic detritus, prevents, more or less, their passage. The object of boiling is to destroy any germ or obnoxious principle that might not have been eliminated by the first filtration. If the water is boiled before filtration, it might contain excessive organic and bacterial matter, and by boiling, the toxic substances may not be completely attenuated and remain dissolved in it. The object of æration is to take off the metallic taste which is imparted to it by boiling. This precaution is particularly essential in regions where cholera, typhoid and dysentery are endemic, and in times of pestilence.

As the supply of water is not constant, and is scanty in many localities, especially in the dry season, dams and reservoirs should be constructed in convenient places to hold the flood-water from rain and melting snow. It is indeed a lamentable fact, that there is complaint of floods and their devastating effects almost every year in India, yet hardly any worth-while attempt is being made to hold the surplus

water by building reservoirs for irrigation and drinking purposes in the summer. Numerous reservoirs now in ruins, scattered all over India and Ceylon, bear testimony to the fact that the ancient Hindus understood their utilities, and utilized them for agricultural uses and rural communal hygiene. Unfortunately they have been allowed to fall into decay, either through rapacious foreign conquests or through administrative negligence, and in many places dense forests have grown on their beds but these stupendous and marvellous works with their net-works of irrigational systems covering extensive territories, are still discernible, and have not yet been completely obliterated by time. By the destruction of the systems that drained the rain-water into the reservoirs, malaria has increased, as rain-water collects into shallow, rural depressions, and form stagnant pools, the most white breeding places of malarial mosquitoes. So not only for drinking water and for irrigation, but also for rural and communal hygiene, the construction and maintenance of reservoirs in order is essential. In marshy districts of Eastern Bengal, Terai and Cashmere valley, extensive canalization will serve many important purposes such as cheap transportation facilities, water-supply and irrigation, and drainage of the sub-soil moisture thus promoting the fertility of the soil and health of the community. Rivers, canals, reservoirs, lakes and ponds should be kept free from vegetable growth, and trees should be so planted on the border that their leaves and fruits can not fall into the water, and pollute it by their decomposition products. In Bengal the ponds are so shallow and covered with

waterweeds and other vegetable growths, that sunlight can hardly penetrate the water and exert its benevolent oxydizing influence, and the water is so rich in organic matter that it has both color and odor, and it virtually swarms with water worms, bugs, amoebas and bacterial flora. Yet, this is the water the people drink, and a majority of them regard themselves lucky if they get it. The wonder therefore, is not that their health is poor, but inspite of chronic ill-health and high mortality, how quite a few survive. Life indeed is very persistent and has wonderful adaptability. This miserable state of affairs can be easily remedied by concerted activities of co-operative social welfare organizations. Shallow pools and dikes should be filled up, canals and ponds deepened and broadened, all the noxious vegetable growths removed, with the trees and plants on the water-edge which might prevent the sun-rays falling upon the water ; or their fallen leaves and fruits pollute the water, by their decomposition. As rainfall is very heavy in Eastern India, especially in Bengal, where the earth is alluvial and the construction of canals and reservoirs requires no highly technical engineering skill, scarcity of drinking water is inexcusable. It is useless for the people to blame the Government for its indifference to, and negligence of the public welfare, when the people themselves show no inclination and formulate no plan to do the work ; for all governments are opportunistic and inefficient and undertake no useful work without public pressure, and more can not be expected from an alien bureaucracy.

Malaria : Malaria is a real scourge in India. It is killing millions annually and invalidating many

millions more. The economic losses it is causing by premature death, sickness and after-effects of the disease, are incalculable. Malaria needs the existence of three organisms—man, mosquito and the plasmodium malariae, and the removal of either of the latter two, will break the lethal chain, that is depopulating the gentry of rural Bengal, and incapacitating those, who survive, for great physical or mental efforts. Mosquitoes need water for the development of their larvae, and swamps and stagnant pools of water are their nurseries, and if they can be drained off or made harmless by spreading kerosene over them, lacking breeding places, they will necessarily die out. Ponds, lakes and canals should be kept free from floating and surface vegetable growths in which mosquitoes deposit their eggs for hatching, and the plants on water-front which shelter them in the time and whose fallen leaves cause decomposition and the smell of which attracts the mosquito. Larvivorous fish should be introduced into water, and they are also economically valuable as many of them are edible. Bats seem to be voracious feeders on mosquito larva. But as the mosquito can fly about the distance of nearly two miles, the elimination of its breeding places requires communal co-operation, and as long as the community is not awakened from its fatal slumber and indifference, to participate this important hygienic measure, quinine should be made cheaply available in the malaria-infected districts, which is the only medicine known that affects the conjugating sporules of malarial plasmodium.

The recent extensive jute cultivation of Eastern

Bengal, has been one of the primary causes of the spread of malaria, for the jute plant needs to be immersed under water for the maceration of its fibers, which necessarily pollutes the water with organic decomposition matter, and this attracts the mosquitoes, which prefer stagnant water with rich organic contents for their breeding places. In northern and western Bengal the roads and railroad embankments constructed without inadequate supply of culverts and aqueducts for the rapid drainage of rain-water, have increased the malarial virulence in those districts, by supplying on large scales, the breeding places of mosquitoes by the accumulation of water into splashes, puddles and ditches, which are the favorite haunts of the mosquitoes on both sides of the road. In Eastern Bengal the cultivation of jute has to be supplanted by some cereals, if a chemical and mechanical device can not be found, which will separate the fibers from the stem without polluting water and utilize the stock for paper-manufacturing. As it stands to-day Bengal is poorer by jute industry than if the land were lying idle. For indirectly the jute industry is spreading malaria and debilitating millions of people, who otherwise set to any productive work, would produce much more wealth for the country. And moreover, the land on which jute is cultivated at present could be used for any agricultural purpose with proper fertilization, thus adding immensely to the food-supply of the country. The roads and the railway embankments are to be sufficiently supplied with culverts and aqueducts, so that drainage is facilitated, and there remains no obstruction of the passage of water, which is not only increasing

malaria, but also causing occasionally destructive floods.

Hookworm-Disease : It is estimated that two-thirds of the people of Bengal, and almost half of the whole of the Indian population are suffering from hookworm disease. The hookworm ('*Ancylostoma duodenale*') is a small intestinal parasite of the thickness of an ordinary pin and half as long. The adult female creature lays thousands of eggs daily in the lower intestine where the hookworm establishes its permanent parasitic colony, and many of these eggs are evacuated with the feces. Once in the ground, the eggs hatch within a day or two. The hatched eggs are almost invisible to the naked eye, and they never grow larger as long as they remain in the ground. If any part of the body, especially the bare feet of children with dissolution of the epithelium, comes in contact with infected ground, the hatched eggs bore their way through the damaged epithelium and the tissues, causing an irritation on the spot, known as 'ground itch.' Once they can cross the barrier of the epithelium, they penetrate their way through the tissues until they come to the lymphatic system, and thence into the blood. Once in the circulation, passing through the heart and lungs, they reach the throat, and thence deglutated with the food and drink, passing through the stomach, settle themselves in the walls of the small intestine. Attaching themselves to the intestinal wall, they rasp and suck the delicate inner cells which they feed upon, laying bare the deeper tissues, and they can live this way nearly seven years unless they are dislodged by medical treatment. And their harmful-

ness does not end there. They develop a toxic substance in their salivary glands which has marked power in causing pathogenic changes in the hemoglobin and its dissolution, and inhibiting the coagulating power of the blood. Though the progress of the disease is insidiously slow and gradual, and has not the quick fatal termination of cholera or plague, yet its evil effects are no less grave, if not more so. It lowers the resisting power against other infections and causes stunted physical and mental growth. The hookworm disease is one of the main causes of tropical indolence, backwardness, lack of energy and ambition. It has been found in severe cases of hookworm infection, that as much as 90 p. c. of the red coloring matter and 50 p. c. of the red corpuscles may be destroyed. But this disease can be easily cured. A dose of Tetrachloride seems to be very efficacious, and it causes least discomfort and inconvenience. A dose of Epsom salts, castor oil, or other purgative, a dose of the oil of thyme followed by another dose of Epsom salts will expel from the intestine the parasitic guests that sap the energy of life. And the expelled hookworms can be seen with the naked eye. And the effect is soon felt in renewed vigor, energy and joy in life. With such a simple and inexpensive remedy, what wonderful communal welfare can be achieved in conquering a disease that is keeping the tropics in backward condition.

Habitation : The dwelling houses in India of the rich and the poor alike are unsanitary and antiquated. The mud-hovels lack ventilation; sun-light and violates every conception of domestic privacy, comforts and

hygiene. The huts of Bengal lack privacy, comforts and the purifying influence of the sun ; the thatch-roof in the rainy season is almost soaked in water, and becomes the nurseries for the breeding of various pathogenic insects, and in summer a combustible pile and regular fire-trap ; the ground on which the people generally sleep, is saturated with sub-soil moisture, and is a breeding place for serpents, lizards and various other unwelcome creeping creatures. The cottage with corrugated iron-roof is no better in some respects than the common hut, and it has the further disadvantage that iron being an easy conductor of temperature, it becomes during the day time in summer, intensely hot and roasts the people alive, while during the night in winter, it becomes very chilly ; and the Indian people, having no arrangements and preparation for this rapid fluctuation of temperature, suffer from its ill-effects. The brick dwellings are cumbersome structures without any consideration of aesthetics, hygiene or comforts, lacking also proper sun-light and ventilation in the sleeping chambers, and without toilet and sewerage. India not only lacks proper sewerage, but its importance to hygiene is not yet completely understood in small towns and villages. And the old-fashioned open sewerage is indeed worse than no sewerage. For the feces not only easily decompose, giving rise to noxious gases, but are, also, often charged with pathogenic germs. If it remains exposed, flies can spread the disease germs, or if it enters into the ground without being disinfected, it might multiply and increase in virulence in the soil ; and any fruit or vegetable mixed with the soil may be a disease carrier. The

proper removal and disinfection of the excremental sewerage, is therefore of paramount importance to the communal health. And it is also of great economic value if it is sterilized and properly treated and mixed with other substances, when safely it can be used as a fertilizer. With modern architectural plans suitable for tropical climate, reinforced concrete buildings should be erected all over India. Where the farmer can not afford all the expenses, Co-operating District Banks should lend him the money, to be paid back in small instalments running for years. Cement is the cheapest and the most durable of all building materials. The U. S. A. for 110 million people in 1921 used 103 million barrels, that is, about 386 pounds per capita ; Japan for the same year for 77 million people used 9 million barrels 44.4 per capita ; while India with 315 million people use only 1.6 million barrels, that is, about 1.9 pounds per capita. Cement has the advantage over other building materials that it can be easily handled and mixed with sand in proper proportion and the mixture, poured into a wooden frame of the size and shape desired, and when it sets and hardens within several hours, a most durable and attractive house can be built.

Alcohol, Nicotine and Opium : The habitual consumption of alcohol, nicotine and opium should be forbidden by law, and their sale penalized except for medical use. None of these narcotic drugs serves any purpose in the economy. On the other hand, the evil effects of their habitual use are apparent and incontestable. Alcoholic beverages, as a re-action, cause muscular and nervous irritation and, fatigue, and

reduces thereby their working efficiency, blunts moral sense, and provokes violence, crime and prostitution. And in the tropics, its consequences seem to be more pernicious than in temperate climates. Tobacco provokes dyspepsia, causes respiratory troubles, and weakens the action of the heart. Opium is an anodyne narcotic. Whether their effects are stimulant or sedative, alcoholic beverages, tobacco-smoke or opium and its derivatives toxicate the system, and are harmful to the organism by their re-actions and cumulative actions. The substances, that are used for making alcoholic drinks, could be easily utilized for valuable nutriments. And the acreage that is now devoted to the cultivation of tobacco and opium-poppy, could be profitably appropriated for raising food-grains, thus, instead of poisoning the public health and debasing the character and morale of the people, the change will increase the food-supply of the country. It is immoral and unjustifiable on the part of the Government to traffic in poisonous drugs, and to stimulate their sale for the sake of revenue. By a heavy import duty on manufactured goods, and an export duty on raw materials, the nation would be set on the path of industrial progress and prosperity, and the Government could raise five times the present revenue with ease.

Dietetics : On food depends the health and activities of the people. It is an incontestable fact. For our energy is derived from what our organism can digest and absorb from the ingested food we eat and drink. And when the ingested food lacks the necessary materials, to repair the tissues that are worn out in the process of metabolic activities, and for growth and

development, to supply the glycogenetic and caloric needs for the muscular movement and work, the organism naturally suffers in arrested growth, which leads to degeneracy of the race. The dietary of our rich and poor alike is irrational and defective, if not in ingredients, at least, in its mode of preparation. Only two meals are usually taken daily, and too much is eaten at each meal, instead of it being distributed at an interval of five hours. The food is usually cooked in oily substances as '*polau and luchi*,' which are thereby made very indigestible, as the digestive ferments can not act well on the ingested food particles with an oily coating. And moreover, the calorific needs of the organism in the tropics is not great. And as rich people lead generally sedentary lives, the excessive consumption of carbohydrates and fats tend naturally to corpulency, interfering with the healthy functioning of the organism. And to stimulate the jaded appetite, excessive irritant spices are used. The poor and the middle classes, at least in Bengal, take rice which is twice decocted, thus losing its minerals and soluble starches and protein, and what remains is nothing but inflated starchy cellulose; and necessarily a bulky quantity has to be taken to cover the bodily needs. The protein ration consists of an ounce or two of pulse, or an ounce of fish in Bengal, which is inadequate to preserve the nitrogenous equilibrium. The consequence is stunted growth, and lack of vital resistance against infectious diseases. The good physique of the Punjabis is not due to better nutrition, but the severe struggle for existence eliminates all the unfit, and the people have to work hard for their liv- a . d .

is comparatively free from the ravages of malarial and hookworm diseases. On the otherhand, the anglicized Indians are going to the other extreme, by imitating everything English without discrimination. They think it is fashionable to take five-o'clock tea, to sip whiskey with the supper, and to smoke a cigar after the dinner. It may be all right for an Englishman in his foggy and chilly atmosphere, to be fond of his tea, to warm himself and to get necessary stimulation for work, but it is the silliest of sillies, for an Indian to drink hot tea, when mercury is boiling at 105 in the shade, and his garments are being soaked with perspiration.

Dress : Whether dress has originated as a sexual ornament and stimulus or, as a protection of the body against cold, heat and wind, both purposes are served by it. That nudity is not incompatible with modesty and decency, is well attested by the behavior of primitive peoples. The psychology of modern feminine dress reveals the fact that it intends to hide the defective parts of the body, to reveal the best parts to advantage, to attract and to sexually stimulate the opposite sex by the partial clever concealment of the erótogetic centres such as the breast, pelvic region, which accentuates the desire more than the complete revelation, for curiosity is the mother of romance. But contrary to the source of its origin, clothing is now almost universally accepted as an expression of decency, though its nature is revealed by the peculiar customs of even civilized countries, as the Chinese and European women regard it indecent to show their feet and legs, but not their breasts as in ball-dances, while in Egypt the Moslem woman would be disgraced by showing

her face, but not her leg ; Japanese woman does not feel any delicacy in being nude and taking her bath in front of her house on the public road, or in a bath tub with other men, or many European women do not think it indecent to undress and put on a new dress, or, take a bath in presence of their male servants, for at that time or with inferiors, there can be no sexual appeal. Man's dress has deviated a good deal from the original and has been more or less utilitarian, for man is no longer desired and selected as a husband for his physical charms, but for community of ideas, ideal and his economic and intellectual ability to support a family. Trousers were perhaps invented in a cold climate, for they give freedom of movement, and movement is calorific and pleasant in frigid weather. The loose folding garb or girdle-dress, on the otherhand, is of tropical origin, for it does not hinder free circulation of air, which is needed in a warm country to keep the body cool, and to dry the perspiration, while at the same time it is decorative and ornamental. But the orient also needs movements and activities, and the loose garment is unsuited for that purpose. The Pajama-like trousers that the Panjabees use are well suited for India. But India does not require under-wear, for it is meant to keep the body warm, while in India one desires to keep the body cool. The upper dress may consist simply of a loose silken or cotton coat. The tight collar and tie can not serve any utility in India, rather they are a nuisance. To protect the head against the actinic rays of the sun, and against the rain, the sola-topi is better suited than the turban or the 'pugri' which is inconvenient, cumbersome and un-

hygienic, as it prevents the circulation of air, interferes with the circulation of blood in the brain by its tightness and constriction, and is very warm. For foot-wear, sandals are very good. 'Sari' is well suited for women. It is graceful in its beautiful foldings, light, allows free circulation of air, and can be washed daily which is needed in the tropics, so that perspiration can not soil it. The 'sari' with boddice and the sandal on her feet make the Indian lady look very pretty, becoming, charming and picturesque. But if a dark-complexioned Indian woman puts on black skirt and smoke hat, she looks ugly, almost like a monkey. Fortunately, Indian women have been sensible enough to appreciate the aesthetic harmony of the 'sari', and have not adopted European dress, which is quite unsuited and unhealthy for a tropical climate, which some of their foolish male members have done.

: Dress and ornaments are synonymous with primitive life, both serving as sexual charms, and with advancement, the ornaments have been made auxiliary to the dress. The savage uses grease-paint to decorate himself. With advancement, he uses tottoeing. The savage woman in addition uses a few colored pebbles, shells and feathers as a girdle, and to hang loose on her private part, as an indication of her wealth and position and as a sexual allurements. The man only hides his membrum virile when he becomes old and incapable which is held as a disgrace, and for the primitive man, the highest punishment is not death, but castration. The savage women look contemptuously upon a castrated or an impotent man and spit in his front. It is probable that

elderly chieftains who lost their virility, adopted the loin-apron to cover their weakness, and made it fashionable; and now its use is regarded as indicative of decency. And though in primitive times women's shells, colored beads and plumes were distinction marks of her wealth, to-day jewellery serves no important purpose, either of æsthetics or of finance. It is very likely that the custom of marriage-ring originated from the chastity-lock which is still used in West Africa, especially for female-slaves, whose labia majora are tied by a bronze-lock and in Europe as late as the medieval ages, the crusaders used it to safeguard the chastity of their wives during their absence, and it can be seen in all European Museums, known as 'Schamgurtel,' and the ring is its symbolic expression. It is true that it has lost its original meaning, and woman's ornaments have been regarded in India as the family bank account, being available liquid capital in times of emergency. But an ounce of gold or silver will more than double itself, even if it were deposited in a Savings Bank, and a business enterprise is likely to double it in a year, while the same amount of gold or silver will rather depreciate in value in the same time, if it were converted into an ornament. Some people believe that a woman's ornaments are a good advertisement of her husband's wealth; but her weight in gold or silver amounts to only a few thousand rupees, and a prison is no less a prison if it be of golden chains and bars. As to æsthetics, ornaments hardly enhance the beauty or charms of the wearer; a flower well-placed in the waving locks of a maiden, a floral bracelet or a garland will beautify her and gratify her æsthetic sense much

more by the delicate tints and the suffused fragrance of the flowers. It may be that some refined women evaluate jewellery not by its intrinsic worth, but as a token of love and esteem with which they are held. Gold is but a poor medium for the expression of the delicate mobile emotions which evade any such crystallised form. Man reciprocates love by love which is a complex sentiment of mutual bio-tropic attraction, admiration and idealization in romantic intoxication, in which pain and suffering become transformed into inexpressible pleasure and joy, and woman having deeper intuition than man, would be but a poor judge to measure man's love by the amount of gold, he bestows on her. India has been virtually the invisible, fathomless pit in which a respectable share of the world's gold and silver has been sunk in useless, unæsthetic and unproductive ornaments, simply to satisfy the idle vanity of senseless women. This immense gold and silver reservoir should be tapped and mobilized as liquid capital to develop a nation-wide banking and credit system for the agricultural and industrial development of the country to the inestimable benefit of all.

Physical Exercise : Every nation has its popular, favorite sport. England has her cricket, America her base-ball, Japan her wrestling, but India has forgotten hers. Greece prided in her Olympic games, as much as in her arts and philosophy, and that was but right. Play renews the life-energy of a nation. It teaches muscular movements, coordination and agility, accelerates circulation of the blood, quickness of determination and will-power, relaxes mind from cares and anxieties,

invigorates the organism, in the most pleasant and seductive form. Play is an excellent preparation for life. Like a dynamo, it recharges the organism with vital energy. It is anti-dote to physical and mental over-work. Animals have to hunt before they get anything to eat. This gives them sufficient muscular exercise to maintain and strengthen their tonicity. We take three heavy meals without any movement. Without muscular contraction, the heart can not pump the blood, the alimentary canal can not digest and absorb the food, we can not chew, see, speak or do anything. We are simply bundles of muscles. Our activities depend on their health and vigor. The whole organism suffers from their flabbiness. It is often said that in a tropical climate, exercise is uncomfortable. And the extravagant expenditure of energy, entailed in physical exercise, can be conserved for more useful purposes. But it is forgotten that exercise is vital to the proper functioning of life, as it helps thereby in the elimination of the metabolic wastes, whose partial retention is apt to produce premature senility, and expresses in the mental sphere in irritability of temperament. Play therefore becomes refreshing by the elimination of the metabolic waste products, which without sufficient movement might be retained in the organism. If it does not appeal to elderly people to spend their energy aimlessly, play and utility can be harmoniously and profitably combined in India, in improving the hygienic conditions of the country such as building canals, constructing water reservoirs, deepening river and lake beds, making roads and bridges, thus also learning physical and mental

discipline and cooperating activities for mutual benefit. For there is no difference between play and work, except in the mental attitude associated with the operation. An enforced play is a harder task than work for hire, while any work done enthusiastically from fullness of heart, is lighter and more recreating than play.

Sexual Hygiene: Sex is the utility of the biotic surplus energy as an end-product of nutritional balance. Sexual energy needs therefore to be correlated with nutritional reserve. During pubescence this nutritional excess should be reserved to be used for complete physical and intellectual development. Neither during early adolescence, can an aspiring youth afford such extravagant expenditure of concentrated phosphatized lecithin, which is also the basis of the nervous structure,

the sexual embrace entails. Semen is not an excretory product. Besides phosphates, lecithin, its activating principle—spermin advances interorganic and intercellular oxidation thus facilitating the elimination of the products of regressive metamorphosis of albuminous substances or leucamines, which are toxic, and whose accumulation in the system predisposes the organism to disease and infection. Though the mating instinct is awakened with puberty, chastity should be observed quite a few years longer as a self-disciplinary training and for the welfare of the race, for early parenthood means race degeneration physically as well as mentally; for physical maturity is not coincident with puberty, and is not attained before 25 and mental fitness for parenthood requires a longer period. To enjoy therefore the fullness and intensity

of life and as well for the racial advancement, it is not desirable for a man to marry before 25, and for a woman before 22. And it goes without saying that the extra-conjugal union is anti-social, and is apt to expose oneself to infection of venereal diseases. Sex impulse should be disciplined and regulated to the channel that is conducive to individual happiness as well as to racial progress. Sexual ferment is a beautiful thing. It is a supreme joy and glory, for its expression is regenerative and it is divine intoxication, for it has inspired genius, created poetry, music, arts and civilization. But in the wrong direction, it has wrecked individual happiness, life, conjugal peace, fruitful careers, kingdoms and empires. Such a mighty passion capable of immense good or immense harm, should be thoroughly disciplined.

VI.

GROWTH OF NATIONALISM.

The ideal of India has been, from time immemorial, the perfection of the soul through the development of the moral qualities of universal love, truth, sincerity and righteousness. The soul being immortal, the salvation of the soul has been thought more important than success in life on the temporary earthly abode, especially by evil and unworthy acts, thus mortgaging the whole future existence. The salvation of the soul is not only the individual concern, but also of the family and the tribe (gotra), for a sinful act is likely to counteract the good deeds of the ancestors up to the fourteenth generation, and to degrade their souls by the action of his sins. The good and evil deeds (karma) like the inalienable biophores of germ-plasm determine the characteristics of rebirth of the numerous transmigration of the soul, until through perfect life, final Nirvana has been attained. If every one followed his religious injunctions, cultivated the moral qualities, did not covet other people's goods, conquered base passions—lust, greed and violence, there would have been no necessity of State. The State is a corporate body of individuals. The individuals delegate the power to a king or a representative assembly to punish the wrong-doers, to protect honest and virtuous people, to make people enjoy their fullest freedom of action, as long as it does not interfere with the freedom of others, and to defend the country against any foreign

aggression. The state could carry out these manifold functions more efficiently and economically than the individuals themselves, hence the necessity of state-organization. But with the king the idea of autocracy and irresponsibility are associated, as originally the king secured the power and prerogatives by might alone, but in the Hindu conception of the king, the king had duties to perform as well as any of his humblest subjects, and if he did not carry them faithfully, he forfeited not only all his rights, but also the redemption of his soul. This is the ideal of Hindu society. Religion is inseparably interwoven with social and civic duties and responsibilities.

Hindu Society exacts duties from all. And the duties have been distributed according to the natural qualifications of the people. Hindu society is a conglomeration of various ethnic stocks. Each ethnic group has its own racially inherited, traditional and hereditarily acquired occupational characteristics. Hindu society has been divided into numerous classes according to their race and hereditary occupations, and according to their inherent and natural capabilities, duties and responsibilities. And the result is a marvelous and efficient Hindu social organization—a wonderful harmonious mosaic of diverse ethnic groups and civilizations, working and living together without any racial antagonism or friction, in mutual cooperation and benefit. And higher one is on the ladder of social and cultural scale, more serious and arduous are the duties and responsibilities, and severer the punishment in their omission or commission of offence than one of humbler order. Thus if a Brahmin drinks or commits

an adultery, he is excommunicated and severely punished, for better things are expected from him, and he by his ignoble acts compromises and defiles the superior position which his class enjoys ; while for the same offence a Sudra or a Chandala goes entirely scot-free, for nothing better can be expected from his low position, lacking culture and refinement. Thus to Brahmins have been entrusted the educational responsibilities of the people and legislative function of the State ; to the Ksatriyas the military duties and administrative responsibilities, that is the executive function ; to Vaisayas commercial, industrial and agricultural enterprises ; Sudra is the proletariat, and is to supply the manual labor for agricultural, industrial, engineering and other needs of the country. This natural division of labor and responsibilities according to inherent fitness of the people, impartial and upright sense of justice and equity, have moulded the numerous ethnic elements into one indivisible interdependent, mutually cooperative Hindu community. And the Hindu knows no racial or color prejudice. Its holy politic has successfully assimilated heterogenous ethnic groups, even alien stocks, *entirely foreign in language, customs and religion*, as the Yavanas (Ionian invaders including Syrians and other Mediterranean mercenary soldiers), Sakas and Huns, and has incorporated them indistinguishably into its social organism. And though caste in its inception might have originated in the color distinction (varna) between the Aryans and the non-Aryans, yet now a dark Brahmin, just because his complexion is non-Aryan, would not lose his social privileges, nor would he marry a Sudra girl for her lot.

complexion or Aryan features. Color or physical features have lost their original demarcating value in the formation of caste, if they ever had it. The consequence is that Hindu society is completely free from any color barrier or prejudices, which are virulent in the United States of America and South Africa. The caste has simply moulded the heterogeneous races in India in one system of society with community of interests, without completely fusing them, allotting to each one its proper place, duties and privileges according to its inherent fitness and capabilities, thus adding to the efficiency of Hindu social organization, productivity and harmony. A carpenter's son is better fitted to be a carpenter by hereditary and environmental influences than to be a preacher or teacher. A Brahmin's son is a born-teacher, born and brought up in the atmosphere of learning and culture, and though he might lack proper education and schooling, he has still innate capacities of a teacher. Heredity leaves an indelible print on the psychic as on the somatic characteristics. An untutored and unschooled Brahmin girl has natural refinement, polish of manner and dignified graceful charms which an educated Sudra girl might well envy. Equality of opportunities is but a pleasant seductive theory. There is no equality anywhere. Never the two grains or blades of grasses are the same. One has superior qualities and by their possession acquires privileges which he transmits to his children. Progress and advancement of society demand that inheritance is acknowledged and honored, not only the property real and personal, but also the acquired social merits, which act as a great

impetus to nobility of thoughts and actions. In other countries the fusion of races has been brought about by the ruthless extermination of the autochthonous peoples, except their desired daughters and wives by the conquering race, and with the commingling of blood, a nationhood has been formed with the same language, physiognomy and religion. Indo-Aryans did not solve racial, religious, and language-problems, and created a united nation, by exterminating aboriginal peoples or forcibly stamping their civilization on others in haughty arrogance of superior assumption, but preserved them, gave them liberty of their speech, religious faiths and practices, and gave them a dignified place to live and work side by side in peace and order, in the natural system of division of labor, only levelling the differences by slow and friendly cultural intercourse.

India did not create a nation in the Western sense, but preserved her humanity, which is more important and fundamental to her regeneration. Her ideal has been to develop man internally by perfecting the soul-qualities by religio-moral injunctions and teaching, thus to make the state auto-regulative by the moral advancement of the people, while in the West the people try to keep a decent moral exterior, in fear of criminal punishment for its violation. In India the child is impressed from infancy: Do not lie, steal, commit adultery or an immoral thing, for by these evil acts (karma) you will degrade your soul, which is the worst imaginable punishment to a Hindu, whether he is caught or uncaught; while in the West the child gets the impression that if one is caught in the commission of perjury, theft or adultery, it will lead him to the

penitentiary, so he is careful not to be caught. According to Hindu Polity, to covet the possession of others, to wage an unjust war and unlawful warfare is a crime and unworthy of Kshatrya; according to Western ethics, every war of conquest by any means is legitimate, if thereby, victory is obtainable, and the vanquished must pay the price. In ancient India kings fought, not for greed or covetousness, but for chivalry and *honor*. And the defeated monarch or his heir did not lose his throne and domain, but rather was reinstated by the victor making an alliance with him, nor were the people molested, or brought under a different system of administration, or state. In the West they fight for power and possession, and the subjects of the vanquished king come under the victorious suzerainty. The consequence is that in India, we have still nearly six hundred petty monarchies, while Western States are practically consolidated with a common language, uniform laws and institutions.

When the people are virtuous, peaceful and law-abiding, there is no necessity of a strong centralized government, powerful State or fervid national consciousness, unless it becomes imperative as a defensive measure against foreign aggression. With the Greek conquest of northern India, the upper and middle India became consolidated into a powerful and extensive empire for the first time, under the Mauryan dynasty to drive the Ionean foes out of the country. And though the eclectic mind of the Hindus borrowed many things from Hellenic contact, especially in fine arts and astronomy, the Hindu chroniclers disdainfully ignore Alexander's military incursion, and the word Yavanas in Sanskrit

language is synonymous with barbarians. This clearly indicates national consciousness and pride. This does not mean that before the Greek raid, the people did not love their country. On the contrary, from time immemorial, on every beautiful spot of the country, there has been a sacred shrine and holy pilgrimage, thus indicating a fervent religious love for India. If all men were virtuous and peace-loving, and one tribe or the military organization of a State did not fall upon the people of another tribe or State, and rob them of their lands and goods by violence, and lived by honest pursuits in brotherly love and neighborly cooperation, there would have been no necessity for growth of exclusive nationalism, born in suspicion and hatred of others. If man were esteemed everywhere for his intrinsic worth—his intelligence, honesty, virtues, capabilities and deeds, irrespective of his color, race, religion, or the section of the Earth he was born in, man would have thought, not in terms of regional patriotism, but in terms of human Brotherhood. Nationalism and patriotism are awakened and fostered to defend the integrity of a geographic area—to safeguard the common vital interests—the safety and honor of the cherished beloved family, land, cattle, dwellings and hoarded wealth, against foreign aggression and exploitation. In an Imperial State to preserve the acquired interests and privileges in conquered territories, the imperialist nation may appeal to national honor and prestige, but it can not evoke deep chords of self-sacrificing patriotic sentiments, as in the idealistic youths of an outraged country. However it may be born and cultivated in both the defensive and offensive oper-

ations of one's own country. The Hindu States being conceived not as organizations of foreign conquests and exploitations, but on non-aggression, righteousness, justice and honor, they did not need to cultivate sectional narrow patriotism as a national asset of strength through unified purpose and action. The Hindu Law Books are distinctive from all Law Books to have legislated in terms of universal humanity (mānava).

In medieval ages the dominant passion of man was his religion. Necessarily his community of interests lay with his religious order, and racial and economic bonds were subordinated to it. Consequently the State was theocratic. The salvation of the soul being more important than the comforts of life, and the votary of each religion believing his faith is the only true faith and other religions are the traps to destroy the 'true religion,' he thought it was his sacred duty to wage holy war for it, and so the Moslems fought the unbelievers, the Christians the infidels, the Catholics the Protestants. Nationalism can not have any place in such state of morbid religious fanatic susceptibility of mind. Nor has it yet entirely died out. Its virulence still lingers, though in attenuated form in many religious organizations, interfering and poisoning the free social and cultural intercourse of peoples. It is true in the world war, the national greed for economic aggrandizements and commercial jealousy and rivalry, the Catholic France fought against Catholic Austria, the Protestant England fought against Protestant Germany, and the mercenary Moslem soldiers of India fought against their religious head the Caliphate, thus indicating religious apathy, if not indifference. But throughout

the Christian Churches, war-like demonstrations rang out, as soon as the Nationalist army of Kemal Pasha, reached Smyrna, to defend the Christian civilization from Islam. And the humble servants of the Apostle of Peace, turned overnight into priests of fiery Mars.

However religious faith is declining everywhere, and skepticism is rampant among the thinking classes who are leading fashion of to-morrow. And it is unquestionably true that religion has lost its former vicious grip upon the masses, and no state policy is now guided by religious sentiment. It is based purely and simply on economic opportunism. With economic ascendancy in the eighteenth century, national patriotism has been stimulated to preserve the economic interests. England came into power in India in the transitional period of her political existence. The Moghul empire was being disrupted by the Marhatta ascendancy in the Deccan and the Sikh ascendancy in the Punjab. The Hindus having suffered long persecutions from their Moslem brethren, welcomed a third party that promised to respect their religion, protect their life, property and honor, and give them a stable, impartial and progressive government and save them from the chaotic morass into which India was then sinking. England found it advantageous and profitable to capitalize the differences that existed between the Hindus and the Moslems, and to widen and deepen the abyss between them, so that she could bargain and appeal to religious and individual interests at the cost of the nation, and keeping the balance by adeptly inflaming the passions of one against the other, she could rule them both to

her purpose. Many Hindus became dazzled by British civilization. They thought their new conquerors were demi-gods and ideal rulers, as depicted in their Sastras. England needed intermediaries between the government and the people, and used them in the administrative machinery and in the expansion of British power and influence, and took them to the upper parts of India, where now the people naturally, with the awakening of the national consciousness, look down upon the Bengali Babus, who went there with the British conquerors to help them to establish their authority. Many Bengalees even went further than that. They wanted to shine in the borrowed plumage of their conqueror, and prided in imitating in blind servile fashion, the English dress, manners, customs and language, without discriminating whether they were suitable for adoption without adaptation for oriental society and tropical hygiene. Many anglicized their names as Mitter from Mitra, Law from Laha, Tagore from Thakura, and quite a few changed their religion and adopted Christianity. They became quite denationalized. They began to find fault with every thing in their country, its climate, culture, institutions, manners and language, and longed to go to England which they thought was an earthly paradise, and where also they prided in sending their children for education. India, indeed, paid a heavy price. But it was not too high. The old Order needed adaptations to new conditions of life, and it was necessary for India to go through this painful process of rebirth. Britain brought to India peace, order, modern system of government, introduced railroad, telegraph and other scientific

inventions of the century, opened schools, colleges, hospitals, brought India in close touch with the modern world, and if India paid for it, a few hundred million rupees a year, it was certainly not too dear to purchase with it a broad and rational outlook of life. The economic drainage has been more than sufficiently compensated by the benefits it conferred. Peace and order are the basis of progress, and India needed it badly, as she had not known it for centuries. The strong British army and navy guaranteed the security of the country against foreign invasions and internal peace, and thus laid the foundation on a stable basis for the cultural and intellectual advancement of the country, which is more vital to national regeneration than mere economic prosperity. And British Industry and capital, also, created new avenues of wealth by developing the natural resources, which had remained unexplored or unappreciated.

But education, economic distress of the middle-classes due to the incessant drainage of the wealth of the country, the reflex-reactions of world-politics, the awakening of the masses to a sense of their potential power in unity of purpose and action, the surging wave of the spirit of world-democracy and self-determination, the special privileges and favoritism shown to Britishers in discrimination against the Indians, the monopoly of high-salaried positions by them, their haughty arrogance and exclusiveness, the growing consciousness of the educated classes in their own abilities, the common interests of the Hindus and the Moslems in the economic, social and cultural advancement of the country, the general scientific

education and its agnostic influence on religious beliefs, are levelling the religious differences and forging a bond of national solidarity and unity. Unfortunately the cement of this unity is the mutual hate for the British. Nationalism is growing rabid in India. Even when the British Indian government does a good thing, evils are suspected in it. From disease to lack of rain or excessive rain—all the ills India suffers from, social, economic or barometric—everything is ascribed to the British cupidity, greed and rapine. The fact is that ruthless Western aggressions and exploitations have turned the blood of Asia into gall. But can Asia now convert her chains of slavery into armor of liberty, and challenge Western supremacy?

The Hindus and the Chinese are peace-loving, industrious and intelligent peoples. The Chinese rightly placed the soldier at the bottom of the social ladder. For a soldier is a non-producer and destroyer of values; he is simply a licensed murderer and incendiary. He may be still tolerated as a necessary evil in existing international conditions, when a strong nation falls upon the weak as a legitimate prey, but he cannot be an ideal of a civilized and refined community. It is a sad commentary of modern civilization, as a Japanese diplomat when congratulated upon his country's victory over the Russians in the Russo-Japanese War (1905) laconically expressed: "I do not understand this present praise of the Japanese. We have been sending you for generations our arts, our literature and our religion to receive your appreciation, but you did not pay any attention to them, and you called us uncivilized heathen. Now when we have learnt well from you the

game of modern warfare, you call us civilized, regard us fit to be a member of the Committee of Nations, and find our art and bronzes queer and charming. And now there is a sudden craze of popularity for everything Japanese." And Asia has not been slow to learn the lesson that the modern world as yet acknowledges no right without might, and in international relations, the imponderable might is the only weighty argument behind the amiable, fine, humanitarian phraseology. The oriental mind is not dull. It is keen, reflective and synthetic. It can learn, adopt and assimilate science quickly. Scientific inventions and research can not long remain the monopoly of the occident. It will be an evil day for humanity, if the Orient is driven by desperation to assert her rights by the contest of armed strength. It is true, the League of Nations has been established to supplant armed conflict by international conference. But it is simply a League of the victors of the late war to safeguard and guarantee the spoils of the victory and the present status quo. It does not redress the wrongs of the past. It does not promise any assuring hope to the oppressed nations and peoples. It does not appeal to Moral Law—the sole arbiter of right or wrong applicable to all people without distinction of race, nationality or religion, as a true League of the peoples should. as a Guardian of Peace to bring harmony and good-will among mankind.

Great Britain, the only powerful imperialistic Nation remaining, will do well to reflect that ; (1) Imperialism in the days of democratic restless spirit of self-assertion of equal right and opportunity is likely to be an expensive national conceit ; (2) Ruling an unwilling alien

people does not bring any lasting economic or political advantage to the ruling nation ; (3) Force can not alone without moral aid, decide anything fundamentally, and the human Will can defy and conquer brute force. The proud Austrian and German empires lie agonizing and disabled in their deadly gory wounds, and bear ample testimony and warning to imperialistic follies, ambitions, and reliance on force alone. The economic advantage of imperialism is only a fallacy. Great Britain has more trade with the U. S. A. which is a free country, than with India, which has almost double the population of the former. The days are gone by, when trade followed the flag. Political antagonism and suspicion are not the proper agents to stimulate exchange of commodities and commercial transaction. Indian people can not be forced to buy British goods against their will. And the loss of Indian trade will be a severer blow to England than the loss of military and political control over the country. And the chronic poverty of India, due to the short-sighted fiscal policy adopted in the country by Great Britain, paralyzing her industrial life, compels her to reduce her purchases abroad to the minimum of her needs. British obstinacy to stick to the old order and not to modify it in time to the present and future requirements of the country, is likely to intensify and integrate nationalism in India. The Hindu and Moslem fraternity is not ephemeral and evanescent. It will not evaporate into thin air when the passion roused by the Caliphate question subsides. It is organic. The Hindus and the Moslems belong to the same race, speak the same language, inhabit the same country.

have the same outlook upon life, and suffer from the same political and economic disadvantages. Indian Islam has been suffused with Hindu pantheism, and Hinduism tinged with the Islamic monotheistic conception. The religious difference has been and is being levelled by modern scientific education and rational thinking. There is no fundamental difference. Only the Hindus use Sanskrit Brahman for God and use Sanskrit language to designate their name, while the Moslems use the Arabic Allah for God and Arabic words for their personal names. This does not imply any radical cleavage. A common destiny unites them in an inseparable link, interwoven by mutual cooperation, sympathy, love and service for themselves and for the common Motherland.

Nationalism may be a passing phenomena. But in the existing order of international relation, it seems to be an imperatively necessary stage for realization of the brotherhood of man. British imperialism, by economic and political pressure, is bringing the heterogenous ethnic group and religious beliefs together, and fusing them into the type of an ardent glowing patriot—right or wrong, always for his motherland, in the intense heat of racial hate, passions and prejudices, and in the struggle for existence, and is serving unwittingly Indian Nationalism. But it is to be hoped that India will not have to traverse a mire of blood to reach her goal. The Jews are a persecuted people. Yet by intelligence, industry and co-operation, they are holding the purse-strings of proud, conquering nations, and are dictating their foreign policies to their own advantage. India can profitably follow this bright example. India needs

an efficient stable government, that will look to the interests of India first, promote her education, industry and hygiene, without which no progress is possible. Her motto does not need to be : "We would rather have bad government by ourselves than good government with the cooperation of the English. Right or wrong everything Indian is good and ought to be praised.' But it should be : "If the real welfare of the country can be promoted by self-abnegation, pride and selfishness should not stand in the way of efficient service. If a foreigner can do the work better than an Indian, let the foreigner be welcomed for the task. If an Englishman's presence exerts a salutary influence in maximizing work, removing venality, favoritism and graft, his high salary should not be grudged, for it has a disciplinary value. One ought not to think—my countryman first whether he is a fit man in the proper place or not. But if my country is right I shall make her better, but if not right, I shall make her right." Indian Nationalism should not be a self-centered and self-contained goal by itself, but a transitional phase, that of bringing co-operation and love of all mankind. Indian Nationalism must not be like the Western States, an aggressive or self-sufficient entity, but a stepping-stone to Humanity.
